APPENDIX D

AIR QUALITY IMPACT ANALYSIS

AUGUST 2006

LSA ASSOCIATES, INC.

AIR QUALITY ANALYSIS

WAL-MART SUPERCENTER AT CANYON CROSSINGS

Submitted to:

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Riverside, California

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LSA Project No. CTR530

LSA

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1.0 EXECUTIVE SUMMARY

LSA Associates, Inc. (LSA) was retained by the City of Riverside (City) to prepare an air quality study for the proposed Wal-Mart Supercenter at Canyon Crossings located in the City of Riverside in Riverside County, California.

This air quality study provides a discussion of the proposed project, the physical setting of the project area, and the regulatory framework for air quality. The report provides data on existing air quality, evaluates potential air quality impacts associated with the proposed project, and identifies feasible mitigation measures recommended for potentially significant impacts. Modeled air quality levels are based upon vehicle data and project trip generation provided in the project's *Traffic Impact Analysis* (LSA, July 2006) and peak-hour turn volumes generated for the proposed project combined with emission factors from the California Air Resources Board (ARB) EMFAC2002 program.

Historical air quality data show that existing carbon monoxide (CO) levels for the project area and the general vicinity do not exceed either State or federal ambient air quality standards. The project-related traffic would not result in any federal or State CO standards being exceeded. No significant impact on local CO levels would occur. Localized significance thresholds would not be exceeded by either construction or operation of the project. Long-term operational emissions associated with the proposed project, from both mobile and stationary sources both on site and off site, would exceed CO, reactive organic compounds (ROC), and nitrogen oxide (NO_x) thresholds established by the South Coast Air Quality Management District (SCAQMD). The project site is planned for commercial use in the City of Riverside General Plan and is zoned for commercial use. The Canyon Springs Specific Plan was adopted in 1984, establishing an integrated retail and office center covering approximately 318 acres at the intersection of State Route 60 (SR-60) and Interstate 215 (I-215). Emissions projections used to establish SCAQMD attainment objectives reflect adopted regional and local land use plans. Therefore, the emissions associated with the proposed project are expected to be within the amounts already accounted for in the South Coast Air Quality Management Plan. However, the project emissions would be significant, and mitigation measures are required.

The evaluation was prepared in conformance with appropriate standards, utilizing procedures and methodologies in the SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook (SCAQMD 1993). Air quality data posted on the ARB and U.S. Environmental Protection Agency (EPA) Web sites are included to document the local air quality environment.

2.0 PROJECT DESCRIPTION

The Wal-Mart Supercenter at Canyon Crossings (proposed project) is located in the City of Riverside, Riverside County, California. The proposed project is located southeast of the interchange of SR-60 and I-215 and is bounded by Valley Springs Parkway to the west and Corporate Center Place to the south. Figure 1 shows the regional location and vicinity of the proposed project.

The proposed project is a 235,000-square-foot Wal-Mart Supercenter on an approximately 24-acre site. The following uses are proposed: general merchandise, groceries and liquor sales, a pharmacy with drive-through service, a vision care center, a food service center, a photo studio, a photo finishing center, a banking center, an arcade, a garden center, a tire and lube facility, outdoor sale facilities, outside container storage facilities, rooftop proprietary satellite communication facilities, parking facilities, and all other appurtenant structures and facilities necessary for the aforementioned sales and services. With the exception of the tire and lube facility, the Wal-Mart Supercenter will operate 24 hours per day. The Wal-Mart parcel would provide approximately 965 parking spaces. Primary access to the site would be from Corporate Center Place. Two secondary access points are to be located on Valley Springs Parkway. The Wal-Mart Supercenter would relocate the existing 125,873-square-foot Wal-Mart retail store from the existing Wal-Mart building on the adjacent northeastern parcel to the new Wal-Mart Supercenter building. Figure 2 shows the proposed site plan.

Implementation of this project will require a conditional use permit and design review, grading, and building permits, as well as a street vacation of a portion of Campus Parkway, westerly of Corporate Centre Place. Additionally, other applicable permits from responsible agencies may be required, including but not limited to the Water Quality Control Board and the Air Quality Management District. The proposed project is expected to begin operations in 2006.

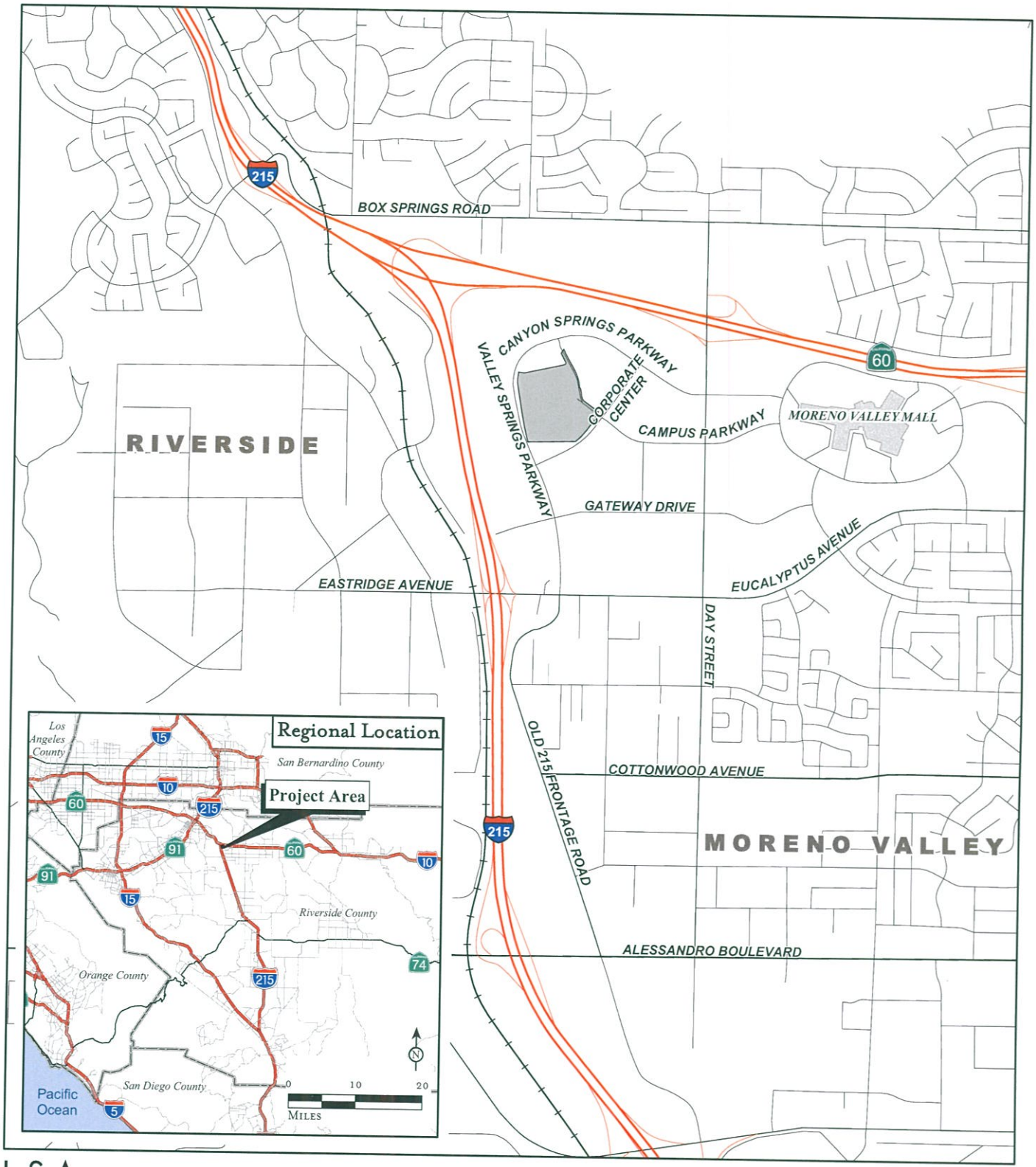

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FIGURE 1

SOURCE: Thomas Bros., 2004

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Wal-Mart Supercenter at Canyon Crossings

Regional and Project Location

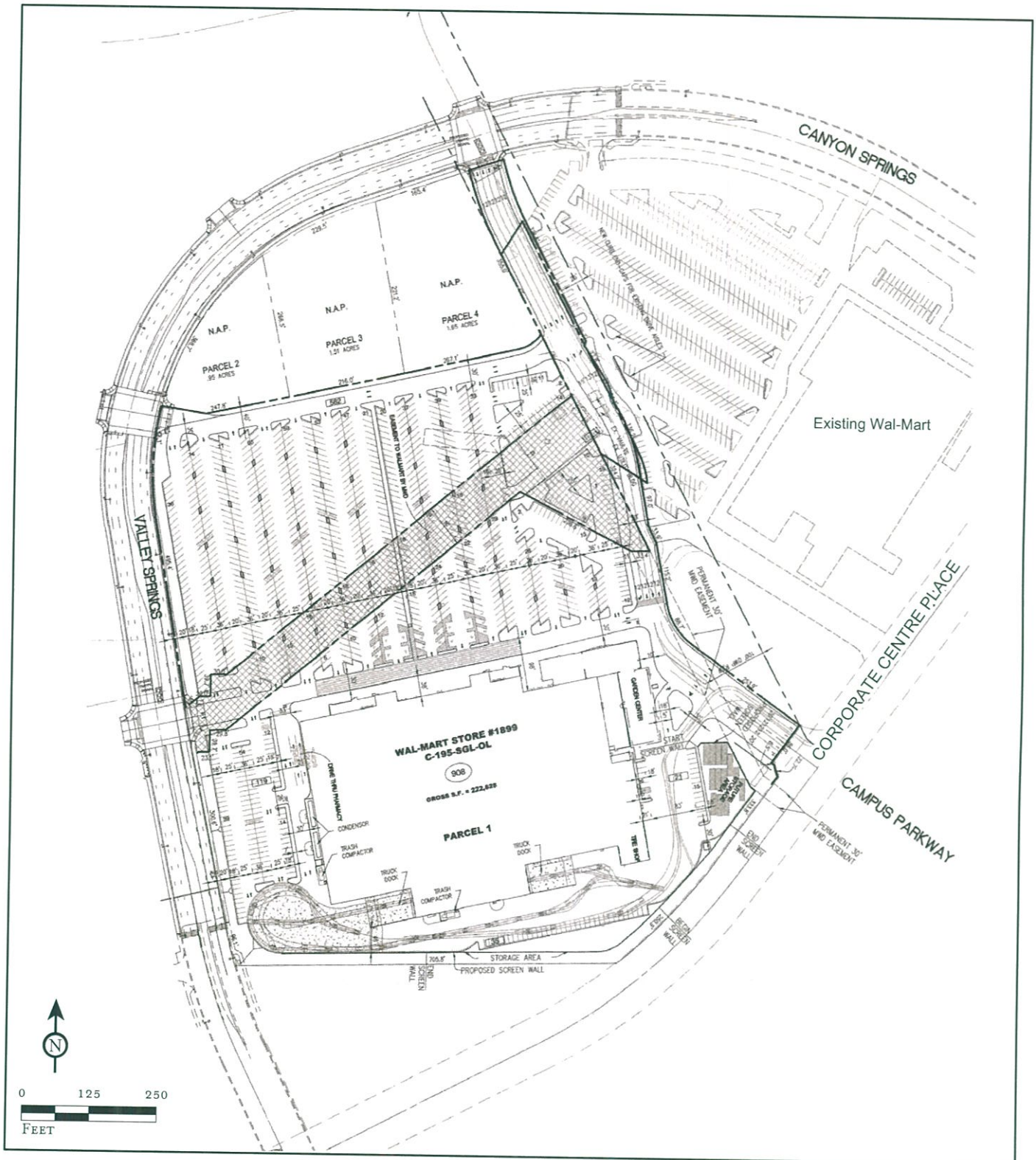

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FIGURE 2

METROPOLITAN WATER DISTRICT PARCEL

Wal-Mart Supercenter at Canyon Crossings

Conceptual Site Plan

SOURCE: Hall and Foreman, 2005

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3.0 SETTING

3.1 REGIONAL AIR QUALITY

The project site is located in the City of Riverside, located in northwestern Riverside County, California, which is part of the South Coast Air Basin (Basin) and is under the jurisdiction of the SCAQMD. The air quality assessment for the proposed project includes estimating emissions associated with short-term construction and long-term operation of the proposed project.

A number of air quality modeling tools are available to assess the air quality impacts of projects. In addition, certain air districts, such as the SCAQMD, have created guidelines and requirements to conduct air quality analyses. The SCAQMD's current guidelines, included in its *CEQA Air Quality Handbook* (April 1993), were adhered to in the assessment of air quality impacts for the proposed project.

3.1.1 Regional Air Quality

Both the State of California (State) and the federal government have established health-based ambient air quality standards (AAQS) for six air pollutants. As shown in Table A, these pollutants include ozone (O_3), CO, nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter with a diameter of 10 microns or less (PM_{10}), and lead (Pb). In July 1997, the EPA adopted new standards for eight-hour ozone and for fine particulate matter less than 2.5 microns in diameter ($PM_{2.5}$). In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

In addition to setting out primary and secondary AAQS, the State has established a set of episode criteria for O_3, CO, NO_2, SO_2, and PM_{10}. These criteria refer to episode levels representing periods of short-term exposure to air pollutants that actually threaten public health. Health effects are progressively more severe as pollutant levels increase from Stage One to Stage Three. Table B lists the primary health effects and sources of common air pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety (EPA), these health effects will not occur unless the standards are exceeded by a large margin or for a prolonged period of time. State AAQS are more stringent than federal AAQS. Among the pollutants, ozone (O_3) and particulate matter ($PM_{2.5}$ and PM_{10}) are considered regional pollutants, while the others have more localized effects.

The California Clean Air Act (CCAA) provides the air districts, such as SCAQMD, with the authority to manage transportation activities at indirect sources. Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution. Examples of this would be the motor vehicles at an intersection, a mall, and on highways. The SCAQMD also regulates stationary sources of pollution throughout its jurisdictional area. Direct emissions from motor vehicles are regulated by ARB.

Table A: Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1-Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	--	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.07 ppm (137 µg/m³)		0.08 ppm (157 µg/m³)[8]		
Respirable Particulate Matter (PM_{10})	24-Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		50 µg/m³		
Fine Particulate Matter ($PM_{2.5}$)	24-Hour	No Separate State Standard		65 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	15 µg/m³		
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m³)	None	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m³)		35 ppm (40 mg/m³)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m³)		—	—	—
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	—	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m³)	Same as Primary Standard	Gas Phase Chemiluminescence
	1-Hour	0.25 ppm (470 µg/m³)		—		
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	—	Ultraviolet Fluorescence	0.030 ppm (80 µg/m³)	—	Spectrophotometry (Pararosaniline Method)
	24-Hour	0.04 ppm (105 µg/m³)		0.14 ppm (365 µg/m³)	—	
	3-Hour	—		—	0.5 ppm (1300 µg/m³)	
	1-Hour	0.25 ppm (655 µg/m³)		—	—	
Lead[9] (Pb)	30 Day Average	1.5 µg/m³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m³	Same as Primary Standard	
Visibility-Reducing Particles	8-Hour	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more (0.07-30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		No Federal Standards		
Sulfates	24-Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[9]	24-Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

Source: ARB (May 17, 2006).

Footnotes:

1 California standards for ozone; carbon monoxide (except Lake Tahoe); sulfur dioxide (1 and 24 hour); nitrogen dioxide; suspended particulate matter - PM_{10}, $PM_{2.5}$, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2 National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact EPA for further clarification and current federal policies.

3 Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4 Any equivalent procedure that can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5 National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6 National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7 Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.

8 New federal eight-hour ozone and fine particulate matter standards were promulgated by EPA on July 18, 1997. Contact EPA for further clarification and current federal policies.

9 The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Table B: Health Effects Summary of Some of the Common Pollutants Found in Air

Pollutant	Health Effects	Examples of Sources
Particulate Matter (PM_{10}: less than or equal to 10 microns)	• Increased respiratory disease • Lung damage • Premature death	• Cars and trucks, especially diesels • Fireplaces, wood stoves • Windblown dust from roadways, agriculture, and construction
Ozone (O_3)	• Breathing difficulties • Lung damage	• Formed by chemical reactions of air pollutants in the presence of sunlight; common sources are motor vehicles, industries, and consumer products
Carbon Monoxide (CO)	• Chest pain in heart patients • Headaches, nausea • Reduced mental alertness • Death at very high levels	• Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves
Nitrogen Dioxide (NO_2)	• Lung damage	• See carbon monoxide sources
Toxic Air Contaminants	• Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders	• Cars and trucks, especially diesels • Industrial sources such as chrome platers • Neighborhood businesses such as dry cleaners and service stations • Building materials and products

Source: ARB 2005.

Climate/Meteorology. Air quality in the planning area is not only affected by various emission sources (mobile, industry, etc.), but also by atmospheric conditions such as wind speed, wind direction, temperature, rainfall, etc. The combination of topography, low mixing height, abundant sunshine, and emissions from the second largest urban area in the United States gives the Basin the worst air pollution problem in the nation.

Climate in the Basin is determined by its terrain and geographical location. The Basin is a coastal plain with connecting broad valleys and low hills. The Pacific Ocean forms the southwestern border, and high mountains surround the rest of the Basin. The Basin lies in the semi-permanent high-pressure zone of the eastern Pacific; the resulting climate is mild and tempered by cool ocean breezes. This climatological pattern is rarely interrupted. However, periods of extremely hot weather, winter storms, and Santa Ana wind conditions do occur.

The annual average temperature varies little throughout the Basin, ranging from the low to middle 60s, measured in degrees Fahrenheit. With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station closest to the site is the Riverside Fire Station 3.[1] The monthly average maximum temperature recorded at this station, from December 1927 to September 2004, ranged from 66.7°F in January to 94.5°F in August, with an annual average maximum of 79.5°F. The monthly average minimum temperature recorded at this station ranged from 39.7°F in January to 60.2°F in July, with an annual average minimum of 49.3°F. January is typically the coldest month, and August is typically the warmest month in this area of the Basin.

The majority of annual rainfall in the Basin occurs between November and April. Summer rainfall is minimal and is generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the Basin and along the coastal side of the mountains. The Riverside Fire Station 3 climatological station monitored precipitation from December 1927 to September 2004. Average monthly rainfall measured during that period varied from 2.28 inches in February to 0.42 inch or less between May and October, with an annual total of 10.33 inches. Patterns in monthly and yearly rainfall totals are unpredictable due to fluctuations in the weather.

The Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in midafternoon to late afternoon on hot summer days, when the smog appears to clear up suddenly. Winter inversions frequently break by midmorning.

Winds in the vicinity of the project area blow predominantly from the east-southeast, with relatively low velocities. Wind speeds in the project area average about four miles per hour (mph). Summer wind speeds average slightly higher than winter wind speeds. Low average wind speeds, together with a persistent temperature inversion limit the vertical dispersion of air pollutants throughout the Basin. Strong, dry, north or northeasterly winds, known as Santa Ana winds, occur during the fall and winter months, dispersing air contaminants. The Santa Ana conditions tend to last for several days at a time.

[1] Western Regional Climate Center, www.wrcc.dri.edu.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are the lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly on shore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problems are CO and oxides of nitrogen (NO_X) because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and NO_X to form photochemical smog.

Air Pollution Constituents and Attainment Status. The ARB coordinates and oversees both State and federal air pollution control programs in California. The ARB oversees activities of local air quality management agencies and maintains air quality monitoring stations throughout the State in conjunction with the EPA and local air districts. The ARB has divided the State into 15 air basins based on meteorological and topographical factors of air pollution. Data collected at these stations are used by the ARB and EPA to classify air basins as attainment, nonattainment, nonattainment-transitional, or unclassified, based on air quality data for the most recent three calendar years compared with the AAQS. Nonattainment areas are imposed with additional restrictions as required by the EPA. The air quality data are also used to monitor progress in attaining air quality standards.

ARB provided the EPA with California's recommendations for eight-hour ozone area designations on July 15, 2003. The recommendations and supporting data were an update to a report submitted to the EPA in July 2000. On December 3, 2003, the EPA published its proposed designations. The EPA's proposal differs from the State's recommendations primarily on the appropriate boundaries for several nonattainment areas. ARB responded to the EPA's proposal on February 4, 2004. The EPA issued final designations on April 15, 2004. On January 20, 2005, ARB adopted changes to the State area designations for ozone, PM_{10}, $PM_{2.5}$, and CO, based on air quality data collected from 2001 through 2003. These State area designations have been approved by the State Office of Administrative Law, and they became effective on July 23, 2005. Table C lists the attainment status for the criteria pollutants in the Basin.

Table C: Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
O_3 1-hour	Extreme Nonattainment	Revoked June 2005
O_3 8-hour	Not Established	Severe-17 Nonattainment
PM_{10}	Nonattainment	Serious Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment (except Los Angeles County)	Attainment (based on findings in the 2003 SCAQMD AQMP)
NO_2	Attainment	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment	Attainment
All others	Attainment/Unclassified	Attainment/Unclassified

Source: ARB 2006 (http://www.arb.ca.gov/desig/desig.htm).

Ozone. O_3 (smog) is formed by photochemical reactions between NO_X and reactive organic gases (ROG) rather than being directly emitted. O_3 is a pungent colorless gas typical of Southern California smog. Elevated O_3 concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, the elderly, and young children. O_3 levels peak during summer and early fall. The entire Basin is designated as a nonattainment area for the State one-hour O_3 standard. The EPA has classified the Basin as Severe-17 nonattainment for eight-hour O_3 standard, meaning that by 2021 the Basin must be in attainment.

Carbon Monoxide. CO is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairment to central nervous system functions. The entire Basin is designated as a serious nonattainment area for federal CO standards. However, based on data monitored in the entire Basin, no CO violations have been recorded in the past three years for the federal CO standards. It is anticipated that the Basin will be re-classified to CO attainment status in the coming years. Only the Los Angeles County portion of the SCAQMD district has been designated by the ARB to be a nonattainment-transitional area for State CO standards, the portion of the district the project is in is designated attainment.

Nitrogen Oxides. NO_2, a reddish brown gas, and nitric oxide (NO), a colorless, odorless gas, are formed from fuel combustion under high temperature or pressure. These compounds are referred to as nitrogen oxides, or NO_X. NO_X is a primary component of the photochemical smog reaction. It also contributes to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition (i.e., acid rain). NO_2 decreases lung function and may reduce resistance to infection. The entire Basin has not exceeded both federal and State standards for NO_2 in the past five years with published monitoring data. It is designated as a maintenance area under the federal standards and an attainment area under the State standards.

Sulfur Dioxide. SO_2 is a colorless, irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO_2 levels. SO_2 irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight. The entire Basin is in attainment with both federal and State SO_2 standards.

Lead. Pb is found in old paints and coatings, plumbing, and a variety of other materials. Once in the blood stream, lead can cause damage to the brain, nervous system, and other body systems. Children are highly susceptible to the effects of lead. The entire Basin is in attainment for the federal and State standards for lead.

Particulate Matter. Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles, PM_{10}, derive from a variety of sources, including windblown dust and grinding operations. Fuel combustion and resultant exhaust from power plants and diesel buses and trucks are primarily responsible for fine particle, $PM_{2.5}$, levels. Fine particles can

also be formed in the atmosphere through chemical reactions. PM_{10} can accumulate in the respiratory system and aggravate health problems such as asthma. The EPA's scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to the health effects listed in a number of recently published community epidemiological studies at concentrations that extend well below those allowed by the current PM_{10} standards. These health effects include premature death and increased hospital admissions and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms. The entire Basin is a nonattainment area for the federal and State PM_{10} and $PM_{2.5}$ standards.

3.1.2 Local Air Quality

The SCAQMD, together with the ARB, maintains ambient air quality monitoring stations in the Basin. The air quality monitoring station closest to the site is the Riverside-Rubidoux Station, and its air quality trends are representative of the ambient air quality in the project area. The pollutants monitored are CO, O_3, PM_{10}, $PM_{2.5}$, NO_2, and SO_2.[1]

The ambient air quality data in Table D show that NO_2, SO_2, and CO levels are below the relevant State and federal standards in the project vicinity, while O_3, and PM_{10}, and $PM_{2.5}$ often exceed both State and federal standards.

3.1.3 Regulatory Settings

Federal Regulations/Standards. Pursuant to the federal Clean Air Act (CAA) of 1970, the EPA established national ambient air quality standards (NAAQS). The NAAQS were established for the six major pollutants described above in Section 3.1, termed "criteria" pollutants. Criteria pollutants are defined as those pollutants for which the federal and State governments have established AAQS, or criteria, for outdoor concentrations in order to protect public health. These standards are listed in Table A.

The EPA established new national air quality standards for ground-level O_3 and $PM_{2.5}$ matter in 1997. On May 14, 1999, the Court of Appeals for the District of Columbia Circuit issued a decision ruling that the CAA, as applied in setting the new public health standards for O_3 and particulate matter, was unconstitutional as an improper delegation of legislative authority to the EPA. On February 27, 2001,

[1] Air quality data, 2006; EPA and ARB Web sites.

Table D: Ambient Air Quality at the Riverside-Rubidoux Air Monitoring Station

Pollutant / Standard	2003	2004	2005
Carbon Monoxide (CO)			
Maximum 1-hr concentration (ppm)	4.5	4.3	3.4
Number of days exceeded: State: > 20 ppm	0	0	0
Federal: > 35 ppm	0	0	0
Maximum 8-hr concentration (ppm)	3.67	2.97	2.50
Number of days exceeded: State: ≥ 9.0 ppm	0	0	0
Federal: ≥ 9 ppm	0	0	0
Ozone (O_3)			
Maximum 1-hr concentration (ppm)	0.169	0.141	0.144
Number of days exceeded: State: > 0.09 ppm	80	59	46
Maximum 8-hr concentration (ppm)	0.140	0.114	0.129
Number of days exceeded: State: > 0.07 ppm	NA	NA	NA
Federal: > 0.08 ppm	62	35	32
Coarse Particulates (PM_{10})			
Maximum 24-hr concentration ($\mu g/m^3$)	164	137	123
Number of days exceeded: State: > 50 $\mu g/m^3$	59	70	67
Federal: > 150 $\mu g/m^3$	2	0	0
Annual arithmetic average concentration ($\mu g/m^3$)	55.1	53.5	50.4
Exceeded for the year: State: > 20 $\mu g/m^3$	Yes	Yes	Yes
Federal: > 50 $\mu g/m^3$	Yes	Yes	Yes
Fine Particulates ($PM_{2.5}$)			
Maximum 24-hr concentration ($\mu g/m^3$)	104.3	91.7	98.7
Number of days exceeded: Federal: > 65 $\mu g/m^3$	8	5	4
Annual arithmetic average concentration ($\mu g/m^3$)	24.8	22.1	21.0
Exceeded for the year: State: > 12 $\mu g/m^3$	Yes	Yes	Yes
Federal: > 15 $\mu g/m^3$	Yes	Yes	Yes
Nitrogen Dioxide (NO_2)			
Maximum 1-hr concentration (ppm)	0.099	0.092	0.077
Number of days exceeded: State: > 0.25 ppm	0	0	0
Annual arithmetic average concentration (ppm)	0.021	0.017	0.022
Exceeded for the year: Federal: > 0.053 ppm	No	No	No
Sulfur Dioxide (SO_2)			
Maximum 1-hr concentration (ppm)	0.018	0.017	0.024
Number of days exceeded: State: > 0.25 ppm	0	0	0
Maximum 3-hr concentration (ppm)	0.015	0.016	0.012
Number of days exceeded: Federal: > 0.5 ppm	0	0	0
Maximum 24-hr concentration (ppm)	0.012	0.015	0.011
Number of days exceeded: State: > 0.04 ppm	0	0	0
Federal: > 0.14 ppm	0	0	0
Annual arithmetic average concentration (ppm)	0.003	0.004	0.004
Exceeded for the year: Federal: > 0.030 ppm	No	No	No

Sources: EPA (www.epa.gov/air/data/index.html) and ARB (www.arb.ca.gov/adam/welcome.html)
ppm = parts per million
$\mu g/m^3$ = microgram of pollutant per cubic meter of air
NA = Data not available

the U.S. Supreme Court upheld the way that the government sets air quality standards under the CAA. The Court unanimously rejected industry arguments that the EPA must consider financial cost as well as health benefits in writing standards. The Justices also rejected arguments that the EPA took too much lawmaking power from Congress when it set tougher standards for O_3 and soot in 1997. Nevertheless, the Court threw out the EPA's policy for implementing new O_3 rules, stating that the EPA ignored a section of the law that restricts its authority to enforce such rules.

In April 2003, the EPA was cleared by the White House Office of Management and Budget (OMB) to implement the eight-hour ground-level O_3 standard. The EPA issued the proposed rule implementing the eight-hour O_3 standard in April 2003. The EPA completed final eight-hour nonattainment status on April 15, 2004 and revoked the one-hour standard on June 15, 2005.

The EPA issued the final $PM_{2.5}$ implementation rule in fall 2004. The EPA issued final designations on December 14, 2004.

State Regulations/Standards. The State began to set California ambient air quality standards (CAAQS) in 1969 under the mandate of the Mulford-Carrell Act. The CAAQS are generally more stringent than the NAAQS. In addition to the six criteria pollutants covered by the NAAQS, there are CAAQS for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are also listed in Table A.

Originally, there were no attainment deadlines for CAAQS; however, the CCAA of 1988 provided a time frame and a planning structure to promote their attainment. The CCAA required nonattainment areas in the State to prepare attainment plans and proposed to classify each such area on the basis of the submitted plan, as follows: moderate, if CAAQS attainment could not occur before December 31, 1994; serious, if CAAQS attainment could not occur before December 31, 1997; and severe, if CAAQS attainment could not be conclusively demonstrated at all. The attainment plans are required to achieve a minimum 5 percent annual reduction in the emissions of nonattainment pollutants unless all feasible measures have been implemented.

The EPA has designated the Southern California Association of Governments (SCAG) as the Metropolitan Planning Organization (MPO) responsible for ensuring compliance with the requirements of the CAA for the Basin.

Regional Air Quality Planning Framework. The 1976 Lewis Air Quality Management Act established the SCAQMD and other air districts throughout the State. The federal CAA Amendments of 1977 required that each state adopt an implementation plan outlining pollution control measures to attain the federal standards in nonattainment areas of the state.

The ARB is responsible for incorporating air quality management plans for local air basins into a State Implementation Plan (SIP) for EPA approval. Significant authority for air quality control within them has been given to local air districts that regulate stationary source emissions and develop local nonattainment plans.

Regional Air Quality Management Plan (AQMP). The SCAQMD and the SCAG are responsible for formulating and implementing the AQMP for the Basin. Every three years the SCAQMD prepares a new AQMP, updating the previous plan and having a 20-year horizon. The SCAQMD adopted the 2003 AQMP in August 2003 and forwarded it to ARB for review and approval. The ARB approved a modified version of the 2003 AQMP and forwarded it to the EPA in October 2003 for review and approval.

The 2003 AQMP updates the attainment demonstration for the federal standards for O_3 and PM_{10}; replaces the 1997 attainment demonstration for the federal CO standard and provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal NO_2 standard that the Basin has met since 1992.

The 2003 AQMP proposes policies and measures to achieve federal and state standards for healthful air quality in the Basin and those portions of the Salton Sea Air Basin (formerly named the Southeast Desert Air Basin) that are under District jurisdiction (namely, Coachella Valley [CV]). The Coachella Valley PM_{10} Plan was revised in June 2002 and forwarded to CARB and U.S. EPA for approval. U.S. EPA approved the 2002 CVSIP on April 18, 2003.

This revision to the AQMP also addresses several state and federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes and new air quality modeling tools. This AQMP is consistent with and builds upon the approaches taken in the 1997 AQMP and the 1999 Amendments to the Ozone SIP for the South Coast Air Basin for the attainment of the federal ozone air quality standard. However, this revision points to the urgent need for additional emission reductions (beyond those incorporated in the 1997/99 Plan) to offset increased emission estimates from mobile sources and meet all federal criteria pollutant standards within the timeframes allowed under the federal CAA.

4.0 THRESHOLDS & METHODOLOGY

A project would normally be considered to have a significant effect on air quality if the project would violate any AAQS, contribute substantially to an existing air quality violation, expose sensitive receptors to substantial pollutants concentrations, or conflict with adopted environmental plans and goals of the community in which it is located.

In addition to the federal and State AAQS, there are daily emissions thresholds for construction and operation of a proposed project in the Basin. The Basin is administered by the SCAQMD, and guidelines and emissions thresholds established by the SCAQMD in its CEQA Air Quality Handbook (SCAQMD, April 1993) are used in this analysis.

It should be noted that the emission thresholds were established based on the attainment status of the air basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety (EPA), these emission thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

4.1 THRESHOLDS FOR CONSTRUCTION EMISSIONS

The following CEQA significance thresholds for construction emissions have been established for the Basin:

- 75 pounds per day of ROC
- 100 pounds per day of NO_X
- 550 pounds per day of CO
- 150 pounds per day of PM_{10}
- 150 pounds per day of SO_X

Projects in the Basin with construction-related emissions that exceed any of the emission thresholds should be considered to be significant under CEQA.

4.2 THRESHOLDS FOR OPERATIONAL EMISSIONS

The daily operational emissions "significance" thresholds for the Basin are as follows.

Emission Thresholds for Pollutants with Regional Effects. Projects with operation-related emissions that exceed any of the emission thresholds listed below are considered significant under the SCAQMD guidelines.

- 55 pounds per day of ROC
- 55 pounds per day of NO_X
- 550 pounds per day of CO
- 150 pounds per day of PM_{10}
- 150 pounds per day of SO_X

Local Microscale Concentration Standards. The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. If ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or federal standard, project emissions are considered significant if they increase one-hour CO concentrations by 1.0 part per million (ppm) or more or eight-hour CO concentrations by 0.45 ppm or more. The following are applicable local emission concentration standards for CO:

- California State one-hour CO standard of 20.0 ppm
- California State eight-hour CO standard of 9.0 ppm

Health Risk Analysis Thresholds

For pollutants without defined significance standards or air contaminants not covered by the standard criteria cited above, the definition of substantial pollutant concentrations varies. For toxic air contaminants (TAC), "substantial" is taken to mean that the individual cancer risk exceeds a threshold considered to be a prudent risk management level. If best available control technology for toxics (T-BACT) has been applied, the individual cancer risk to the maximum exposed individual (MEI) must not exceed 10 in 1 million in order for an impact to be determined not to be significant.

Airborne impacts are also derived from materials considered to be a nuisance for which there may not be associated standards. Odors or the deposition of large diameter dust particles outside the PM_{10} size range would be included in this category. It is considered a significant impact for odors and large diameter dust particles if the SCAQMD nuisance (Rule 402) would be potentially violated.

The following limits for maximum individual cancer risk (MICR), cancer burden, and noncancer acute and chronic hazard indices (HI) from project emissions of TACs have been established for the Basin:

- **MICR and Cancer Burden.** MICR is the estimated probability of a potential maximally exposed individual contracting cancer as a result of exposure to TACs over a period of 70 years for residential and 46 years for worker receptor locations. The MICR calculations include multipathway consideration, when applicable. Cancer Burden is the estimated increase in the occurrence of cancer cases in a population subject to a MICR of greater than or equal to one in one million (1.0×10^{-6}) resulting from exposure to TACs.

The cumulative increase in MICR that is the sum of the calculated MICR values for all TACs emitted from the project will not result in any of the following:

(A) an increased MICR greater than 10 in 1 million (1.0×10^{-5}) at any receptor location (assumes the project will be constructed with T-BACT)

(B) a cancer burden greater than 0.5

- **Chronic HI.** This is the ratio of the estimated long-term level of exposure to a TAC for a potential maximally exposed individual to its chronic reference exposure level. The chronic hazard index calculations include multipathway consideration, when applicable.

  The cumulative increase in total chronic HI for any target organ system due to total emissions from the project will not exceed 1.0 at any receptor location.

- **Acute HI.** This is the ratio of the estimated maximum one-hour concentration of a TAC for a potential maximally exposed individual to its acute reference exposure level.

  The cumulative increase in total acute HI for any target organ system due to total emissions from the project will not exceed 1.0 at any receptor location.

4.3 METHODOLOGY

Evaluation of air quality impacts associated with a proposed industrial project typically includes the following:

- Determine the short-term construction air quality impacts based on SCAQMD emissions thresholds
- Determine the long-term air quality impacts, including vehicular traffic, based on SCAQMD emissions thresholds and CO concentration thresholds
- Determine the required mitigation measures to reduce both short- and long-term air quality impacts

Construction Air Quality Impacts

Localized air quality impacts in the project area would be affected due to both heavy-duty construction equipment usage on-site as well as local traffic due to the equipment delivery and construction worker commuting. The SCAQMD CEQA Air Quality Handbook methodology was used to analyze the criteria pollutant emissions from these activities.

Long-Term Air Quality Impacts and Health Risk Impacts

Air quality in the project area would be affected due to long-term air emissions from stationary and mobile sources related to the proposed project. The URBEMIS 2002 model was used to predict impacts from stationary sources such as natural gas fueled heating systems, emissions from landscape maintenance equipment and project-related traffic over the long-term. Localized air quality impacts (i.e., elevated CO concentrations or CO hot spots) in the project area would be affected by increased

traffic flow due to the proposed project. The California Department of Transportation (Caltrans) CALINE4 model was used to assess the project's impact on local CO concentrations.

There are currently no federal project-level requirements for air toxics analysis, and CEQA only requires a consideration of the risks from toxics, with the South Coast Air Quality Management District (SCAQMD) providing the *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (March 2003) for guidance. The SCAQMD has established a maximum individual cancer risk significance threshold of 10 in 1 million (1.0×10^{-5}) (assumes the project will be constructed with best-available control technology for toxics [T-BACT]) and a noncarcinogenic hazard index of 1.0.

This air quality analysis discusses the risks from diesel particulate matter (PM) exhaust, which poses the greatest cancer risk among all identified air toxics as well as the area of highest public concern. According to ARB[1], when conducting a health risk assessment (HRA), the potential cancer risk from inhalation exposure to diesel PM will outweigh the potential noncancer health impacts from diesel PM. Therefore, inhalation cancer risk is required for every HRA. When comparing whole diesel exhaust to speciated diesel exhaust (e.g., polycyclic aromatic hydrocarbons [PAH], metals), potential cancer risk from inhalation exposure to whole diesel exhaust will outweigh the multipathway cancer risk from the speciated components. For this reason, there will be few situations where an analysis of multipathway risk is necessary.[2]

[1] HARP Model Documentation, Appendix K, *Risk Assessment Procedures to Evaluate Particulate Emissions from Diesel-Fueled Engines*, ARB, http://www.arb.ca.gov/toxics/harp/docs/userguide/appendixK.pdf, February 2005.

[2] OEHHA, *Air Toxics Hot Spots Program Risk Assessment Guidelines*, August 2003, Appendix D, *Risk Assessment Procedures to Evaluate Particulate Emissions from Diesel-Fueled Vehicles*, Section B.

5.0 IMPACTS AND MITIGATION

5.1 CONSTRUCTION IMPACTS

Air quality impacts would occur during construction of the proposed project from soil disturbance and equipment exhaust. Major sources of emissions during grading and site preparation include: (1) exhaust emissions from construction vehicles; (2) equipment and fugitive dust generated by construction vehicles and equipment traveling over exposed surfaces; and (3) soil disturbances from grading and backfilling. The following summarizes construction emissions and associated impacts for the project site.

Construction Equipment Emissions

Grading and construction activities would cause combustion emissions from utility engines, heavy-duty construction vehicles, haul trucks, and vehicles transporting the construction crew. Exhaust emissions during grading and other construction activities envisioned on site vary daily as construction activity levels change. Peak grading days typically generate a larger amount of air pollutants than during other project construction days.

It is estimated that construction would take approximately 8 to 10 months. Also, it is estimated that the grading period would take approximately 8 to 12 days for 3 graders grading approximately 2 to 3 acres per day for a 24 acre site. Other construction equipment assumed includes: 2 scrapers, 2 dozers, 3 motor graders, 1 tracked loader, 2 water trucks, 20 haul truck trips per day, and 40 construction worker trips commuting round-trip for 40 miles. The construction emissions estimates summarized in Table E were based on the assumed construction scenario described above. A probable set of equipment utilized is also shown in Table E. Appendix A shows the details of these emissions determinations.

Fugitive Dust

Fugitive dust emissions are generally associated with grading, land clearing, exposure, vehicle and equipment travel on unpaved roads, and dirt/debris pushing. Dust generated during construction activities would vary substantially depending on the level of activity, the specific operations, and weather conditions. Sensitive receptors, such as residents and students in the project vicinity and on-site construction workers, may be exposed to blowing dust, depending on prevailing wind conditions.

Based on the construction assumptions for the proposed project and emission factors from the EPA AP-42 and the SCAQMD CEQA Air Quality Handbook, Table G lists the fugitive dust emissions during the grading periods. This table shows that without mitigation measures, fugitive dust emissions during the grading periods would exceed the SCAQMD threshold of 150 pounds per day during construction. With the implementation of standard conditions, such as frequent watering (e.g., minimum twice per day), fugitive dust emissions from construction activities are expected to be reduced by 50 percent or more. Appendix A includes a worksheet documenting the development of the fugitive dust emissions rate.

Table E: Peak-Day Construction Equipment Exhaust Emissions

Grading	Daily Usage	Emission Rates (lbs/day)				
		CO	ROC	NO_X	SO_X	PM_{10}
2 Scraper	8 hours	11	2.6	34	5.2	1.4
3 Motor Grader	8 hours	7.8	2.0	22	3.8	1.2
2 Dozer/Compactor	8 hours	6.2	1.6	15	2.1	1.0
2 Loader/Backhoe	8 hours	3.2	1.0	6.4	0.9	0.6
1 Mechanic Truck	10 hours	0.13	0.008	0.031	0	0.001
1 Fuel Truck	10 hours	0.13	0.008	0.031	0	0.001
1 Foreman Truck	10 hours	0.13	0.008	0.031	0	0.001
2 Water Truck	15 miles	0.52	0.041	0.11	0	0.005
Haul Trucks (20 trips)	30 miles per trip	6.9	0.40	1.8	0.011	0.060
Construction worker trips (40 trips)	40 miles per trip	12	0.55	1.8	0.011	0.10
Total Grading Exhaust Emissions		**48**	**8.3**	**81**	**12**	**4.3**
Construction						
2 Cranes	8 hours	2.5	0.7	8.0	1.3	0.4
2 Paver	8 hours	3.6	1.0	8.1	1.2	0.6
2 Miscellaneous	8 hours	6.2	1.3	15	2.2	0.7
1 Mechanic Truck	10 hours	0.13	0.008	0.031	0	0.001
1 Fuel Truck	10 hours	0.13	0.008	0.031	0	0.001
1 Foreman Truck	10 hours	0.13	0.008	0.031	0	0.001
1 Water Truck	15 miles	0.26	0.020	0.056	0	0.002
Construction worker trips (40 trips)	40 miles per trip	12	0.55	1.8	0.011	0.102
Total Construction Exhaust Emissions		**25**	**3.6**	**33**	**4.8**	**1.8**

Source: LSA Associates, Inc., August 2006.

With the implementation of the standard construction measures listed in Section 5.6 (providing 50 percent effectiveness) such as frequent watering (i.e., minimum twice per day), fugitive dust emissions from grading activities are expected to be reduced to 251 pounds or less per day. Combined with the 4.3 pounds per day generated by equipment exhaust during grading, the total mitigated dust emissions of 255 pounds per day would exceed the SCAQMD threshold of 150 pounds per day.

Table F lists both construction equipment exhausts and fugitive dust emissions. Table F shows that during peak grading days, daily total construction emissions in compliance with the Standard Air Pollution Control Measures would exceed the SCAQMD thresholds for PM_{10} even with mitigation.

Table F: Peak Grading Day Total Emissions (lbs/day)

Category	CO	ROC	NO_X	SO_X	PM_{10}
Vehicle/equipment exhaust (from Table E)	48	8.3	81	12	4.3
Fugitive dust from soil disturbance, no controls	—	—	—	—	501
Fugitive dust from soil disturbance, with 50 percent control efficiency	—	—	—	—	251
Total grading, no PM_{10} controls	48	8.3	81	12	505
Total grading, with PM_{10} controls	48	8.3	81	12	255
SCAQMD threshold	**550**	**75**	**100**	**150**	**150**
Significant? (with controls)	**No**	**No**	**No**	**No**	**Yes**[1]

Source: LSA, August 2006; EPA, AP-42, Fifth Edition, 1995.

Building Activities. Building construction uses different types of equipment on the project site than during the grading period. Similarities do exist in terms of equipment exhaust emissions and fugitive dust emissions as shown in Table F; however, it is anticipated that emissions during building construction would be below peak grading day emissions. Although it is anticipated that emissions would be similar or lower than the peak grading day total emissions, PM_{10} would potentially exceed the SCAQMD threshold. Therefore, air pollution control measures implemented for the peak grading day emissions would be adequate to reduce emissions during other construction periods.

Architectural Coatings. Architectural coatings contain volatile organic compounds (VOC) that are similar to ROC and are part of the O_3 precursors. At this stage of project planning, no detailed architectural coatings information is available. Compliance with SCAQMD Rule 1113 on the use of architectural coatings should be considered sufficient. An estimate can be made using basic site plan and project information, the project would have one building with 235,000 square feet of floor space. Using the SCAQMD CEQA conversion factor of 2.0 square feet of area to coat per square foot of floor space, this gives an approximate 470,000-square-foot area to cover. Using the SCAQMD recommended VOC emission factor for architectural coatings of 11.6 lbs VOC per 1,000 square feet of coating, which assumes two 4-mil-thick coats, a total project emission of 5,440 lbs of VOC is predicted. Assuming a three-month period of coating application and 22 work days per month, the result is a total of 82 pounds of VOC emitted per day from the application of architectural coatings. This would exceed the SCAQMD threshold of 75 pounds of ROC per day. These emissions would occur after grading activities and near the end of the construction phase.

Emissions associated with architectural coatings could be reduced by using precoated/natural colored building materials, using water-based or low-VOC coating, and using coating transfer or spray equipment with high transfer efficiency. For example, a high-volume, low-pressure (HVLP) spray method is a coating application system operated at air pressure between 0.1 and 10 pounds per square inch gauge (psig), with 65 percent transfer efficiency. Manual applications such as paintbrush, hand roller, trowel, spatula, dauber, rag, or sponge have 100 percent transfer efficiency.

[1] Fugitive dust would exceed the SCAQMD threshold of PM_{10} of 150 pounds per day with control measures required by SCAQMD Rule 403.

The use of a HVLP spray method would increase the transfer efficiency from 25 to 65 percent. This increase in efficiency would reduce the VOC emissions to approximately 38 lbs/day. The use of manual application methods would further reduce the emissions. Thus, with mitigation the emissions of VOC would be less than significant.

Summary of Construction Emissions. Based on the above information, with implementation of feasible measures during construction of the proposed project, emissions from construction equipment exhaust and soil disturbance would be minimized. Construction emissions from the project would exceed the daily emissions thresholds for PM_{10} established by the SCAQMD.

5.2 LONG-TERM REGIONAL AIR QUALITY IMPACTS

Long-term air emission impacts are those associated with stationary sources and mobile sources involving any project-related change. The proposed commercial use would result in both stationary and mobile sources. The stationary source emissions from the commercial uses would come from the consumption of natural gas. Based on the *Traffic Impact Analysis* prepared for this project (LSA Associates, Inc., July 2006), implementation of the proposed project would generate 13,165 daily trips. However, the existing Wal-Mart is closing to be replaced by an electronics superstore, which will have fewer daily trips than the former Wal-Mart. So the net increase from this project is only 11,783 daily trips. Long-term operational emissions associated with the proposed project, calculated with the URBEMIS 2002 model, are shown in Table G. Emissions from the project-related mobile sources would exceed CO, ROC, and NO_x thresholds based on emission factors for 2007. Therefore, project-related long-term air quality impacts would be significant. Mitigation measures will be required.

Table G: Project Operational Emissions

Source	Pollutants, lbs/day				
	CO	ROC	NO_X	SO_2	PM_{10}
Free Standing Discount Store	1,090	90	151	0.65	100
SCAQMD Threshold	**550**	**55**	**55**	**150**	**150**
Exceed SCAQMD Threshold?	**Yes**	**Yes**	**Yes**	**No**	**No**
Significant Air Quality Impact?	**Yes**	**Yes**	**Yes**	**No**	**No**

Source: LSA Associates, Inc., August 2006.

5.3 LONG-TERM MICROSCALE (CO HOT SPOT) ANALYSIS

Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase in local areas as a result of the proposed project. The primary mobile source pollutant of local concern is CO, which is a direct function of vehicle idling time and, thus, traffic flow conditions. CO transport is extremely limited; it disperses rapidly with

distance from the source under normal meteorological conditions. However, under certain extreme meteorological conditions, CO concentrations proximate to a congested roadway or intersection may reach unhealthful levels affecting local sensitive receptors (residents, school children, the elderly, hospital patients, etc). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the Riverside-Rubidoux Station, the closest station with monitored CO data, showed a highest recorded one-hour concentration of 4.5 ppm (State standard is 20 ppm) and a highest eight-hour concentration of 3.67 ppm (State standard is 9 ppm) during the past three years (see Table D).

The highest CO concentrations would occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis. Based on the same *Traffic Impact Analysis* used for the long-term regional analysis above, CO hot spot analyses were conducted for existing and future cumulative conditions. The impact on local carbon monoxide levels was assessed with the ARB approved CALINE4 air quality model, which allows microscale CO concentrations to be estimated along roadway corridors or near intersections. This model is designed to identify localized concentrations of carbon monoxide, often termed "hot spots." A brief discussion of input to the CALINE4 model follows. The analysis was performed for the worst-case wind angle and wind speed condition and is based upon the following assumptions:

- Selected modeling locations represent the intersections closest to the project site, with the highest project-related vehicle turning movements and the worst level of service deterioration.
- Twenty receptor locations with the possibility of extended outdoor exposure from 7 to 24 meters (approximately 23 to 79 feet) of the roadway centerline near intersections were modeled to determine carbon monoxide concentrations.
- The calculations assume a meteorological condition of almost no wind (0.5 meter/second), a suburban topographical condition between the source and receptor, and a mixing height of 1,000 meters, representing a worst-case scenario for CO concentrations.
- CO concentrations are calculated for the one-hour averaging period and then compared to the one-hour standards. CO eight-hour averages are extrapolated using techniques outlined in the SCAQMD *CEQA Air Quality Handbook* (October 1993) and compared to the eight-hour standards; a persistence factor of 0.7 was used to predict the eight-hour concentration in an attainment area.
- Concentrations are given in ppm at each of the receptor locations.
- The "at-grade" link option with speed adjusted based on average cruise speed and number of vehicles per lane per hour was used rather than the "intersection" link selection in the CALINE4 model (Caltrans has suggested that the "intersection" link should not be used due to an inappropriate algorithm based on outdated vehicle distribution). Emission factors from the EMFAC2002 model were used for the vehicle fleet.

- The highest level of the second highest one-hour and eight-hour CO concentrations monitored at the Riverside-Rubidoux Station in the past three years were used as background concentrations (4.4 ppm for the one-hour CO and 3.6 ppm for the eight-hour CO). The "background" concentrations are then added to the model results for future with and without the proposed project conditions.

The proposed project would contribute to increased CO concentrations at intersections in the project vicinity. As shown in Table H, under the existing conditions, all seven intersections analyzed would experience one-hour and eight-hour CO concentrations below the federal and State standards. The existing CO concentrations are from current traffic in the vicinity of these intersections.

Three scenarios were evaluated for traffic impacts from the proposed project: the existing year comparing with and without the project, the project build out year (2007) comparing with and without the project and a later cumulative year including all known nearby projects comparing without and with the project. It is anticipated that emissions in the future years, including CO, will decrease with technology advancement. For these scenarios, traffic volumes projected for the corresponding year were used, with the matching year's emission factors for CO. As a worst-case scenario, the current year (2006) background CO concentrations at the Riverside-Rubidoux Station were used for all scenarios. Table H shows that, under the existing year condition, the proposed project would contribute at most a 0.7 ppm increase to the one-hour CO concentrations and 0.5 to the eight-hour CO concentrations at these intersections. Table I shows that, under the 2007 opening year condition, none of the seven intersections analyzed would exceed either the one-hour or the eight-hour CO concentration federal and State standards. The proposed project would contribute at most a 0.6 ppm increase to the one-hour CO concentrations and 0.4 to the eight-hour CO concentrations at these intersections. Table J shows that, under the cumulative condition, none of the seven intersections analyzed would exceed either the one-hour or the eight-hour CO concentration federal and State standards. The proposed project would contribute at most a 0.2 ppm increase to the one-hour CO concentrations and 0.2 to the eight-hour CO concentrations at these intersections. Because no CO hot spots would occur, the proposed project would not have a significant impact on local air quality for CO, and no mitigation measures would be required.

5.4 PROJECT-RELATED HEALTH RISK ASSESSMENT

A Health Risk Assessment is a process used to estimate the increased risk of health problems in people who are exposed to different amounts of toxic substances. A Health Risk Assessment combines results of studies on the health effects of various animal and human exposures to toxic air pollutants with results of studies that estimate the level of people's exposures at different distances from the sources of the pollutants.

Table H: Existing (2006) CO Concentrations[1]

Intersection	Receptor Distance to Road Centerline (Meters)	Project Related Increase 1-hr/8-hr (ppm)	Without/With Project One-Hour CO Concentration (ppm)	Without/With Project Eight-Hour CO Concentration (ppm)	Exceeds State Standards[2]	
					1-Hr	8-Hr
Valley Springs Pkwy. and Corporate Center Dr.	14 / 14	0.4 / 0.3	5.3 / 5.7	4.2 / 4.5	No	No
	14 / 14	0.5 / 0.3	5.2 / 5.7	4.2 / 4.5	No	No
	14 / 14	0.5 / 0.3	5.2 / 5.7	4.2 / 4.5	No	No
	14 / 14	0.4 / 0.2	5.2 / 5.6	4.2 / 4.4	No	No
Valley Springs Pkwy. and Eucalyptus Ave.	21 / 21	0.7 / 0.5	6.5 / 7.2	5.1 / 5.6	No	No
	17 / 17	0.7 / 0.5	6.5 / 7.2	5.1 / 5.6	No	No
	17 / 17	0.4 / 0.3	6.4 / 6.8	5.0 / 5.3	No	No
	15 / 15	0.5 / 0.4	6.3 / 6.8	4.9 / 5.3	No	No
Old 215 Frntg. Rd. and Alessandro Blvd.	17 / 17	0.2 / 0.1	7.9 / 8.1	6.1 / 6.2	No	No
	17 / 17	0.2 / 0.1	7.8 / 8.0	6.0 / 6.1	No	No
	17 / 17	0.1 / 0.1	7.6 / 7.7	5.8 / 5.9	No	No
	17 / 15	0.4 / 0.2	7.2 / 7.6	5.6 / 5.8	No	No
Day St. and Campus Pkwy.	22 / 22	0.4 / 0.2	6.2 / 6.6	4.9 / 5.1	No	No
	21 / 21	0.2 / 0.1	6.2 / 6.4	4.9 / 5.0	No	No
	21 / 20	0.3 / 0.2	6.1 / 6.4	4.8 / 5.0	No	No
	20 / 15	0.3 / 0.2	6.0 / 6.3	4.7 / 4.9	No	No
Day St. and Eucalyptus Ave.	17 / 17	0.1 / 0.1	6.6 / 6.7	5.1 / 5.2	No	No
	17 / 17	0.1 / 0.1	6.3 / 6.4	4.9 / 5.0	No	No
	17 / 17	0.1 / 0.0	6.2 / 6.3	4.9 / 4.9	No	No
	17 / 17	0.1 / 0.0	6.2 / 6.3	4.9 / 4.9	No	No
Day St. and Cottonwood Ave.	14 / 14	0.1 / 0.1	5.7 / 5.8	4.5 / 4.6	No	No
	12 / 12	0.2 / 0.2	5.6 / 5.8	4.4 / 4.6	No	No
	12 / 12	0.1 / 0.1	5.6 / 5.7	4.4 / 4.5	No	No
	8 / 8	0.1 / 0.0	5.5 / 5.6	4.4 / 4.4	No	No
Day St. and Alessandro Blvd.	17 / 17	0.1 / 0.0	7.2 / 7.3	5.6 / 5.6	No	No
	16 / 16	0.0 / 0.0	7.2 / 7.2	5.6 / 5.6	No	No
	14 / 14	0.1 / 0.1	7.0 / 7.1	5.4 / 5.5	No	No
	14 / 14	0.0 / 0.0	7.0 / 7.0	5.4 / 5.4	No	No

Source: LSA Associates, Inc., August 2006.

[1] Includes ambient one-hour concentration of 4.4 ppm and ambient eight-hour concentration of 3.6 ppm. Measured at the 5888 Mission Blvd., Rubidoux, CA, AQ Station (Riverside County).

[2] State one-hour CO standard in 20 ppm and eight-hour standard is 9.0 ppm.

Table I: Year 2007 CO Concentrations[1]

Intersection	Receptor Distance to Road Centerline (Meters)	Project Related Increase 1-hr/8-hr (ppm)	Without/With Project One-Hour CO Concentration (ppm)	Without/With Project Eight-Hour CO Concentration (ppm)	Exceeds State Standards[2]	
					1-Hr	8-Hr
Valley Springs Pkwy. and Corporate Center Dr.	14 / 14	0.4 / 0.3	5.3 / 5.7	4.2 / 4.5	No	No
	14 / 14	0.4 / 0.2	5.2 / 5.6	4.2 / 4.4	No	No
	14 / 14	0.4 / 0.2	5.2 / 5.6	4.2 / 4.4	No	No
	14 / 14	0.3 / 0.2	5.2 / 5.5	4.2 / 4.4	No	No
Valley Springs Pkwy. and Eucalyptus Ave.	21 / 21	0.6 / 0.4	6.5 / 7.1	5.1 / 5.5	No	No
	17 / 17	0.6 / 0.4	6.4 / 7.0	5.0 / 5.4	No	No
	17 / 17	0.3 / 0.2	6.4 / 6.7	5.0 / 5.2	No	No
	15 / 15	0.4 / 0.3	6.3 / 6.7	4.9 / 5.2	No	No
Old 215 Frntg. Rd. and Alessandro Blvd.	17 / 17	0.1 / 0.0	7.9 / 8.0	6.1 / 6.1	No	No
	17 / 17	0.1 / 0.1	7.8 / 7.9	6.0 / 6.1	No	No
	17 / 17	0.1 / 0.0	7.5 / 7.6	5.8 / 5.8	No	No
	15 / 15	0.1 / 0.1	7.4 / 7.5	5.7 / 5.8	No	No
Day St. and Campus Pkwy.	22 / 24	0.4 / 0.3	6.1 / 6.5	4.8 / 5.1	No	No
	21 / 22	0.2 / 0.1	6.1 / 6.3	4.8 / 4.9	No	No
	21 / 21	0.3 / 0.2	6.0 / 6.3	4.7 / 4.9	No	No
	20 / 20	0.2 / 0.2	6.0 / 6.2	4.7 / 4.9	No	No
Day St. and Eucalyptus Ave.	17 / 17	0.1 / 0.0	6.5 / 6.6	5.1 / 5.1	No	No
	17 / 17	0.0 / 0.0	6.3 / 6.3	4.9 / 4.9	No	No
	17 / 17	0.1 / 0.1	6.1 / 6.2	4.8 / 4.9	No	No
	17 / 17	0.1 / 0.1	6.1 / 6.2	4.8 / 4.9	No	No
Day St. and Cottonwood Ave.	12 / 12	0.2 / 0.2	5.6 / 5.8	4.4 / 4.6	No	No
	12 / 12	0.1 / 0.1	5.6 / 5.7	4.4 / 4.5	No	No
	8 / 8	0.1 / 0.1	5.6 / 5.7	4.4 / 4.5	No	No
	8 / 8	0.1 / 0.0	5.5 / 5.6	4.4 / 4.4	No	No
Day St. and Alessandro Blvd.	17 / 17	0.0 / 0.0	7.2 / 7.2	5.6 / 5.6	No	No
	16 / 16	0.1 / 0.1	7.1 / 7.2	5.5 / 5.6	No	No
	14 / 14	0.0 / 0.0	7.0 / 7.0	5.4 / 5.4	No	No
	14 / 14	0.0 / 0.0	7.0 / 7.0	5.4 / 5.4	No	No

Source: LSA Associates, Inc., August 2006.

[1] Includes ambient one-hour concentration of 4.4 ppm and ambient eight-hour concentration of 3.6 ppm. Measured at the 5888 Mission Blvd., Rubidoux, CA, AQ Station (Riverside County).

[2] State one-hour CO standard in 20 ppm and eight-hour standard is 9.0 ppm.

Table J: Cumulative CO Concentrations[1]

Intersection	Receptor Distance to Road Centerline (Meters)	Project Related Increase 1-hr/8-hr (ppm)	Without/With Project One-Hour CO Concentration (ppm)	Without/With Project Eight-Hour CO Concentration (ppm)	Exceeds State Standards[2]	
					1-Hr	8-Hr
Valley Springs Pkwy. and Corporate Center Dr.	14 / 15	0.1 / 0.0	4.9 / 5.0	4.0 / 4.0	No	No
	14 / 15	0.1 / 0.1	4.8 / 4.9	3.9 / 4.0	No	No
	14 / 14	0.0 / 0.0	4.8 / 4.8	3.9 / 3.9	No	No
	14 / 14	0.1 / 0.1	4.7 / 4.8	3.8 / 3.9	No	No
Valley Springs Pkwy. and Eucalyptus Ave.	21 / 21	0.2 / 0.2	5.3 / 5.5	4.2 / 4.4	No	No
	19 / 17	0.2 / 0.1	5.2 / 5.4	4.2 / 4.3	No	No
	17 / 17	0.2 / 0.1	5.2 / 5.4	4.2 / 4.3	No	No
	17 / 15	0.2 / 0.1	5.2 / 5.4	4.2 / 4.3	No	No
Old 215 Frntg. Rd. and Alessandro Blvd.	17 / 19	0.0 / 0.0	5.4 / 5.4	4.3 / 4.3	No	No
	17 / 17	0.0 / 0.0	5.4 / 5.4	4.3 / 4.3	No	No
	15 / 17	-0.1 / -0.1	5.4 / 5.3	4.3 / 4.2	No	No
	15 / 17	-0.2 / -0.1	5.4 / 5.2	4.3 / 4.2	No	No
Day St. and Campus Pkwy.	22 / 24	0.0 / 0.0	5.1 / 5.1	4.1 / 4.1	No	No
	21 / 22	0.0 / 0.0	5.1 / 5.1	4.1 / 4.1	No	No
	21 / 21	0.0 / 0.0	5.0 / 5.0	4.0 / 4.0	No	No
	20 / 20	0.0 / 0.0	5.0 / 5.0	4.0 / 4.0	No	No
Day St. and Eucalyptus Ave.	17 / 17	0.1 / 0.1	5.3 / 5.4	4.2 / 4.3	No	No
	17 / 17	0.0 / 0.0	5.3 / 5.3	4.2 / 4.2	No	No
	17 / 17	0.0 / 0.0	5.2 / 5.2	4.2 / 4.2	No	No
	17 / 17	0.0 / 0.0	5.2 / 5.2	4.2 / 4.2	No	No
Day St. and Cottonwood Ave.	14 / 14	0.1 / 0.0	5.2 / 5.3	4.2 / 4.2	No	No
	12 / 12	0.1 / 0.1	5.1 / 5.2	4.1 / 4.2	No	No
	12 / 12	0.0 / 0.0	5.1 / 5.1	4.1 / 4.1	No	No
	8 / 8	0.0 / 0.0	5.1 / 5.1	4.1 / 4.1	No	No
Day St. and Alessandro Blvd.	17 / 17	0.0 / 0.0	5.5 / 5.5	4.4 / 4.4	No	No
	16 / 16	0.0 / 0.0	5.3 / 5.3	4.2 / 4.2	No	No
	14 / 14	0.0 / 0.0	5.2 / 5.2	4.2 / 4.2	No	No
	14 / 14	0.0 / 0.0	5.2 / 5.2	4.2 / 4.2	No	No

Source: LSA Associates, Inc., August 2006.

[1] Includes ambient one-hour concentration of 4.4 ppm and ambient eight-hour concentration of 3.6 ppm. Measured at the 5888 Mission Blvd., Rubidoux, CA, AQ Station (Riverside County).

[2] State one-hour CO standard in 20 ppm and eight-hour standard is 9.0 ppm.

Construction Health Risk Impacts

The only toxic air pollution emissions in any significant quantity associated with the construction of the proposed project occur from large, heavy-duty diesel-powered equipment exhaust. While there will be other toxic substances in use on site, compliance with State and federal handling regulations control emissions to below a level of significance. The Office of Environmental Health Hazard Assessment (OEHHA) currently describes the health risk from diesel exhaust entirely in terms of the amount of particulate, or PM_{10}, that is emitted. Currently, the health risk associated with diesel exhaust PM_{10} only has a carcinogenic and chronic effect; no short-term acute effect is recognized.

The construction period of the project lasts only a short time, relative to the length of time required for carcinogenic and chronic health impacts. The anticipated level of construction activity will, even on the most intense day, emit approximately 4.3 lbs/day of diesel exhaust particulate (Table F). Using worst-case screening modeling methods, assuming a full year of construction where the daily emissions stay at this peak day rate, and looking at a resident living for 70 years at 2,000 feet away results in an inhalation cancer risk of approximately 2.4 in a million and a chronic hazard index of 0.14. Refer to Appendix E for details of this analysis. Potential impacts from air toxics associated with diesel trucks during project construction would be less than significant.

Operational Health Risk Impacts

The operations expected to occur at this facility will not emit any toxic chemicals in any significant quantity other than diesel exhaust. While there will be other toxic substances in use on site, compliance with State and federal handling regulations will bring emissions to below a level of significance. Unlike the regional emissions analysis in Section 5.2 where the net increase in daily traffic was analyzed, this health risk assessment is assessing the affect of this project alone on the surrounding environment. Thus the full 13,165 trips per day is used rather than the 11,783 trips per day used in Section 5.2.

This total includes all vehicles involved with the operation of the project, mostly consumers in personal vehicles. The URBEMIS2002 model has built-in fleet percentages based on land use types; this analysis uses those percentages to determine the numbers of diesel trucks. The ARB model, EMFAC2002, was used for emissions factors for trucks both idling and operating to determine the total emissions of diesel exhaust particulate from the project. Refer to Appendix E for details of the analysis.

The closest existing residences to the proposed project are residential uses located at the intersection of Valley Springs Parkway and Eucalyptus Avenue 2,000 feet south of the project boundary. Lands to the west, south, and north are either vacant land or industrial uses.

Acute Project-Related Emission Impacts. No activity related to the project will emit any toxic air pollutants that have short-term acute health effects. There will be no machinery within to emit any toxic air pollutants that have short-term acute health effects. Therefore, the potential for short-term acute exposure from project-related toxic emissions will be less than significant.

Carcinogenic and Chronic Project-Related Emission Impacts. There would be long-term operational emissions from the diesel-powered trucks delivering and removing supplies and materials from the project site. The primary health risk from heavy-duty trucks emissions is diesel particulate exhaust. The results of the analysis are shown in Table K. Even with the conservative modeling technique used (concentrating all truck exhaust to emit from the center of the project area), the nearest residences to the southeast would be exposed to an unmitigated inhalation cancer risk of no more than 0.79 in 1 million, less than the threshold of 10 in a million. The Hazard Index would be 0.0005, less than the threshold of 1.0. No significant health risk would occur from project-related truck traffic, and no mitigation is necessary.

Table K: Project-Related Health Risk Assessment Results

	Cancer Risk (number in 1 million)	Chronic Hazard Index
Nearest Residences	0.79	0.0005
Threshold	**10**	**1.0**

Source: LSA Associates, Inc, August 2006.

5.5 AIR QUALITY MANAGEMENT PLAN CONSISTENCY

The proposed project consists of moving an existing free-standing discount store across a street and replacing the old facility with an electronics superstore. This project is proposed to accommodate the growth projection in the project vicinity and itself is not a growth-inducing project. The project site is planned for commercial use in the City of Riverside General Plan and is zoned for commercial use. Therefore, the project is considered consistent with the City of Riverside General Plan and SCAQMD AQMP.

5.6 STANDARD CONDITIONS

Construction Impacts The project is required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM_{10} component). Compliance with these rules would reduce impacts on nearby sensitive receptors.

The applicable Rule 403 measures are as follows:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving).

- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least two feet of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code (CVC) section 23114.
- Pave construction access roads at least 100 feet onto the site from the main road.
- Reduce traffic speeds on all unpaved roads to 15 miles per hour (mph) or less.

5.7 ADDITIONAL RECOMMENDED MEASURES

A. The following additional dust suppression measures in the SCAQMD *CEQA Air Quality Handbook* are included to further reduce the likelihood of air quality impacts:

- Revegetate disturbed areas as quickly as possible.
- Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.
- Sweep all streets once per day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water).
- Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash trucks and any equipment leaving the site.
- Pave, water, or chemically stabilize all on-site roads as soon as feasible.
- Minimize at all time the area disturbed by clearing, grading, earthmoving, or excavation operations.

B. The Construction Contractor shall select the construction equipment used on site based on low-emission factors and high energy efficiency. The Construction Contractor shall ensure that construction grading plans include a statement that all construction equipment will be tuned and maintained in accordance with the manufacturer's specifications.

C. The Construction Contractor shall utilize electric or diesel-powered equipment in lieu of gasoline-powered engines where feasible.

D. The Construction Contractor shall ensure that construction grading plans include a statement that work crews will shut off equipment not in use. During smog season (May through October), the overall length of the construction period will be extended, thereby decreasing the size of the area prepared each day, to minimize vehicles and equipment operating at the same time.

E. The Construction Contractor shall time the construction activities so as to not interfere with peak-hour traffic and minimize obstruction of through traffic lanes adjacent to the site; if necessary, a flagperson shall be retained to maintain safety adjacent to existing roadways.

F. The Construction Contractor shall support and encourage ridesharing and transit incentives for the construction crew.

G. Compliance with SCAQMD Rule 1113 on the use of architectural coatings should be implemented. Emissions associated with architectural coatings would be reduced by complying with these rules and regulations, which include using precoated/natural-colored building materials, water-based or low volatile organic compound (VOC) coating, and coating transfer or spray equipment with high transfer efficiency.

5.8 CUMULATIVE IMPACTS

The project would contribute criteria pollutants to the area during temporary project construction. A number of individual projects in the area may be under construction simultaneously with the proposed project. Depending on construction schedules and actual implementation of projects in the area, generation of fugitive dust and pollutant emissions during construction could result in substantial short-term increases in air pollutants. This would be a contribution to short-term cumulative air quality impacts.

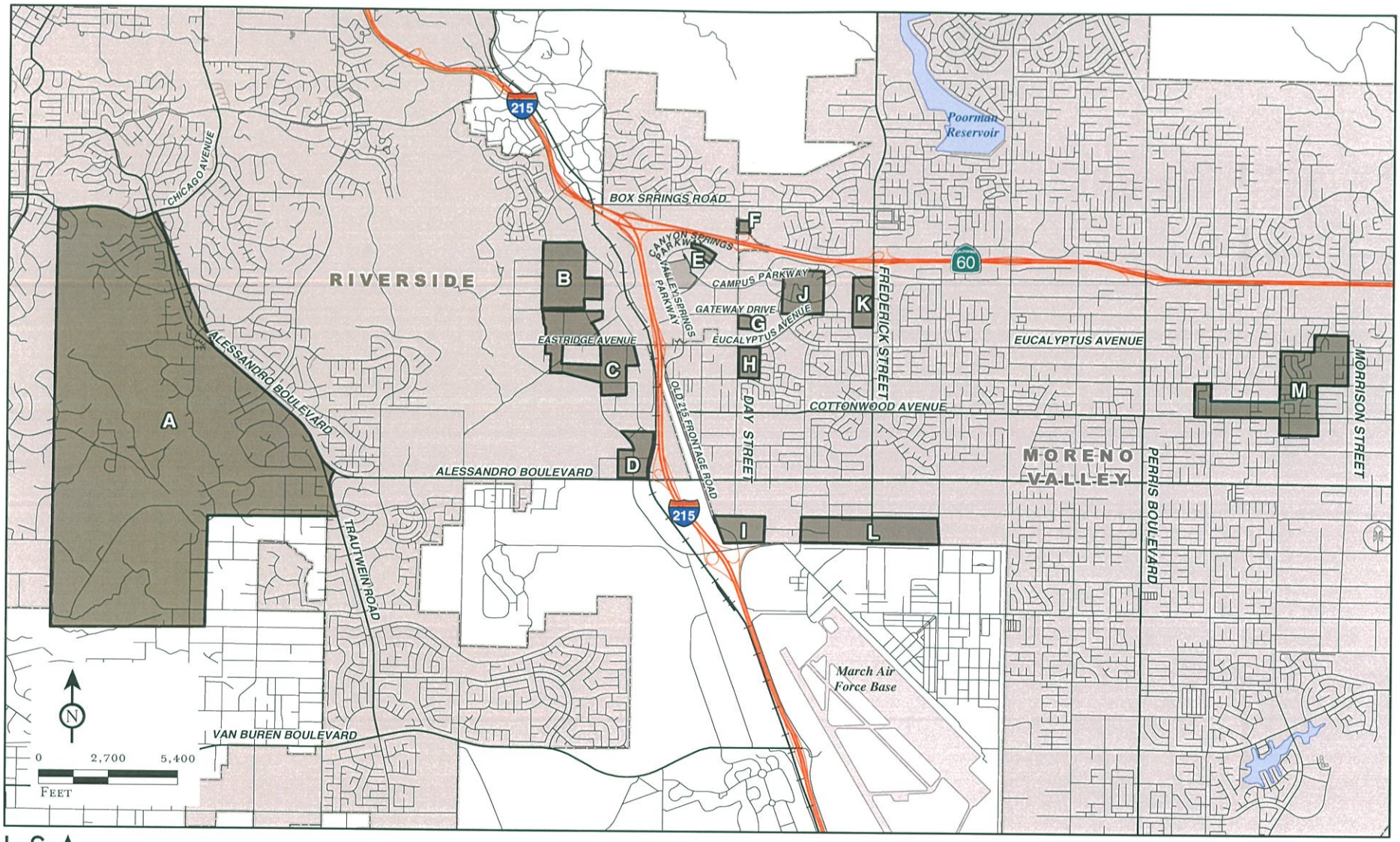
Approximately 80 approved and pending cumulative projects were considered from both the Cities of Riverside and Moreno Valley. These 80 projects were then grouped into 13 subareas, as shown in Figure 3, and their associated vehicular trips are listed below.

Area	Average Daily Traffic
Proposed Project	11,783
Area A	4,811
Area B	14,203
Area C	17,673
Area D	7,574
Area E	26,415
Area F	3,238
Area G	1,626
Area H	20,666
Area I	1,801
Area J	2,648
Area K	10,937
Area L	17,333
Area M	1,091
Total Trips	**141,800**

Source: LSA Associates, Inc., August 2005

The proposed project will contribute less than 10 percent of the total planned daily traffic in the area. The project site is planned for commercial use in the City of Riverside General Plan and is zoned for commercial use. The Canyon Springs Specific Plan was adopted in 1984, establishing an integrated retail and office center covering approximately 318 acres at the intersection of SR-60 and I-215. Emissions projections used to establish SCAQMD attainment objectives reflect adopted regional and

local land use plans. Therefore, the emissions associated with the proposed project are expected to be within the amounts already accounted for in the South Coast Air Quality Management Plan. However, the project will have significant operational air quality impacts. Any individual projects in the area that contribute significantly to these air emissions (which are in nonattainment status) will result in significant cumulative air quality impacts. The Basin is in nonattainment for CO, PM_{10}, $PM_{2.5}$, and ozone at the present time. Therefore, the proposed project would exacerbate nonattainment of air quality standards within the Basin and contribute to adverse cumulative air quality impacts.



LSA

FIGURE 3

APPROVED AND PENDING PROJECT LOCATIONS

CITY BOUNDARY

PROJECT LOCATION

Wal-Mart Supercenter at Canyon Crossings

Approved and Pendiing Project Locations

SOURCE: Thomas Bros., 2004

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The study included in the "Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant," June 1998, estimated that the population-weighted average outdoor diesel exhaust PM_{10} concentration in California for 1995 was 2.2 micrograms per cubic meter ($\mu g/m^3$), with it reaching as high as 10 $\mu g/m^3$ near a freeway. These concentrations of diesel particulates present a carcinogenic health risk ranging from 130 in a million to 2,400 in a million (using a 70-year exposure duration). The study suggests that virtually all residents of California are being exposed to large doses of diesel exhaust PM_{10}. The concentration of diesel particulates at the project site is below the established risk threshold. Individuals living and working in Southern California may be exposed to levels of diesel emissions that are cumulatively significant; however, that circumstance is not created by the project. The proposed project will generate new truck trips, but not in sufficient quantity to result in a cumulatively significant contribution to the diesel emissions in the region.

6.0 REFERENCES

California Air Resources Board. Web site: www.arb.ca.gov.

California Air Resources Board. Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant. 1998.

Caltrans. Transportation Project-Level Carbon Monoxide Protocol. 1997.

LSA Associates, Inc. Wal-Mart Supercenter at Canyon Crossings Traffic Analysis. July 2006.

OEHHA. Air Toxics Hot Spots Program Risk Assessment Guidelines. August 2003.

South Coast Air Quality Management District. Air Quality Management Plan. 2003.

South Coast Air Quality Management District. *CEQA Air Quality Handbook*. 1993.

Western Regional Climate Center. Web site: www.wrcc.dri.edu.

APPENDIX A

CONSTRUCTION WORKSHEETS

CONSTRUCTION EXHAUST WORKSHEET

Grading	# of units	Hours per day	SCAQMD OffRoad EF Diesel Emission Factors (lbs/hour					Load Factor	Emission Rates (lbs/day) CO	ROC	NOx	SOx	PM_{10}
Scraper	2	8	1.001	0.25	3.2	0.5	0.13	0.660	11	2.6	34	5.2	1.4
Motor Grader	3	8	0.567	0.15	1.62	0.28	0.08	0.575	7.8	2.0	22	3.8	1.2
Dozer/Compactor	2	8	0.675	0.17	1.62	0.23	0.11	0.575	6.2	1.6	15	2.1	1.0
Loader/Backhoe	2	8	0.424	0.13	0.86	0.12	0.09	0.465	3.2	1.0	6.4	0.9	0.6
	# of units	Miles per day	EMFAC2002: 2006 Factors Diesel Emission Factors (gms/mi)					Speed (mph)					
Mechanic Truck	1	10	5.831	0.37	1.43	0.01	0.05	25	0.13	0.008	0.031	2E-04	0.001
Fuel Truck	1	10	5.831	0.37	1.43	0.01	0.05	25	0.13	0.008	0.031	2E-04	0.001
Foreman Truck	1	10	5.831	0.37	1.43	0.01	0.05	25	0.13	0.008	0.031	2E-04	0.001
Water Truck	2	15	7.789	0.62	1.69	0.01	0.07	15	0.52	0.041	0.112	8E-04	0.005
Haul Trucks	20	30	5.254	0.3	1.36	0.01	0.05	30	6.9	0.40	1.8	0.011	0.060
			Gasoline Emission Factors (gms/m										
Worker Commute	40	40	3.529	0.16	0.5	0	0.03	50	12	0.55	1.8	0.011	0.10
								Total Grading	**48**	**8.3**	**81**	**12**	**4.3**
Construction	# of units	Hours per day	SCAQMD OffRoad EF Diesel Emission Factors (lbs/hour					Load Factor	Emission Rates (lbs/day) CO	ROC	NOx	SOx	PM_{10}
Cranes	2	8	0.368	0.1	1.16	0.2	0.06	0.430	2.5	0.7	8.0	1.3	0.4
Paver	2	8	0.419	0.12	0.96	0.14	0.07	0.530	3.6	1.0	8.1	1.2	0.6
Miscellaneous	2	8	0.625	0.14	1.48	0.22	0.07	0.620	6.2	1.3	15	2.2	0.7
	# of units	Miles per day	EMFAC2002: Factors Diesel Emission Factors (gms/mi)					Speed (mph)					
Mechanic Truck	1	10	5.831	0.37	1.43	0.01	0.05	25	0.13	0.008	0.031	2E-04	0.001
Fuel Truck	1	10	5.831	0.37	1.43	0.01	0.05	25	0.13	0.008	0.031	2E-04	0.001
Foreman Truck	1	10	5.831	0.37	1.43	0.01	0.05	25	0.13	0.008	0.031	2E-04	0.001
Water Truck	1	15	7.789	0.62	1.69	0.01	0.07	15	0.26	0.020	0.056	4E-04	0.002
			Gasoline Emission Factors (gms/m										
Worker Commute	40	40	3.529	0.16	0.5	0	0.03	50	12	0.55	1.8	0.011	0.102
								Total Construction	**25**	**3.6**	**33**	**4.8**	**1.8**
								SCAQMD Threshold	**550**	**75**	**100**	**150**	**150**

[1] From SCAQMD web site: http://www.aqmd.gov/ceqa/handbook/offroad/offroad.html, downloaded 3/2/2006

LSA Associates, Inc.

Fugitive Dust Emission Worksheet

Emission Source	Emission factor	units	Emission Parameters		Unmitigated Emission Rate (lb/day)	Mitigation Reduction	Mitigated Emission Rate (lb/day)
Wind Erosion/Excavation[1]	0.80	lb/day/acre	10	acres	8.0	50.0%	4.0
Excavation/scraper/dozer[2]	2.9	lb/hour	7	No. of Equip.	161	50.0%	81
			8	hours/day			
Dumping/scraper[3]	5.38E-04	lb/day/ton of dirt handled	40,000	lb handled/Load	2.2	50.0%	1.1
			200	Loads/day			
Hauling/scraper (unpaved)[4]	8.3	lb/day/mile	20	miles/day	166	50.0%	83
Water Truck (unpaved)[4]	8.3	lb/day/mile	15	miles/day	125	50.0%	62
Vehicle travel (paved)[5]	0.78	lb/day/mile	50	miles/day	39	50.0%	19
				Total	**501**		**251**

SCAQMD CEQA Handbook Data - Appendix 9

#1 - Wind Erosion of Storage Piles - Table A9-9-E		
E = (1.7 x [G/1.5] x [365-H]/235*[I/15]) x J (lbs/day/acre)		
G = Silt content (percent)	15	(Table A9-9-E-1: Blended ore and dirt)
H = No. Days with >0.01" precip/year	34	(Table A9-9-E-2: Average day for SCAB)
I = percent of time wind >12mph	100	(Worst case)
J = TSP Fraction	0.5	(SCAQMD CEQA factor)

#2 - Dirt Pushing or Bulldozing - Table A9-9-F		
E = ([0.45 x ({[G]$^{1.5}$}/{[H]$^{1.4}$}] x 2.2046) (lbs/hr)		
G = Silt content (percent)	15	(Table A9-9-F-1: Blended ore and dirt)
H = Moisture content (percent)	8.5	(Table A9-9-F-2: 1/2 way between "dry" (2) and "moist" (15))

#3 - Dirt piling or Material Handling - Table A9-9-G		
E = [0.00112 x ({[G/5]$^{1.3}$} / {[H/2]$^{1.4}$})] (lbs/day/lb of dirt handled)		
G = Mean wind speed (mph)	6	(From local meteorlogical data)
H = Moisture content (percent)	4	(Table A9-9-G-1: "dry" (2), "moist" (15), EPA recom. 4)

#4 - Travel on Unpaved Roads - Table A9-9-D		
E = 2.1 x [G/12] x [H/30] x {[J/3]$^{0.7}$} x {[I/4]$^{0.5}$} x {[365 - K]/365} (lb/day/mile)		
G = Silt loading (percent)	24	(Table A9-9-D-1: Coal Mine Haul Road (freshly scraped))
H = Mean vehicle speed (mph)	15	(Table A9-9-D-2: Recommended maximum)
I = Mean number of wheels	8	(Mix of 4, 6 and 18 wheeled trucks)
J = Mean vehicle weight (tons)	15	
K = No. Days with >0.01" precip/year	34	(Table A9-9-D-4: Average day for SCAB)

#5 - Travel on Paved Roads - Table A9-9-C		
E = 0.77 x {(G x)$^{0.3}$} (lbs/day/mile)		
G = Silt loading (oz/yd^2)	2.95	(Table A9-9-C-1: Industrial Sites (in operation))

From Mark's Std Hnbk for Engineers:		cu yds/truck	lb/load
lb/cu ft for soil (dry, loose)	76	15	30,780
lb/cu ft for soil (dry, packed)	95	15	38,475
lb/cu ft for soil (moist, loose)	78	15	31,590
lb/cu ft for soil (moist, packe	96	15	38,880

APPENDIX B

URBEMIS MODELING OUTPUT

URBEMIS 2002 For Windows 8.7.0

File Name: P:\CTR530\Air & Noise Modeling\Project.urb
Project Name: WalMart Supercenter at Canyon Crossings
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	3.42	0.00	0.78	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	79.39	104.62	1,089.05	0.65	100.04

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	82.81	104.62	1,089.83	0.65	100.04

URBEMIS 2002 For Windows 8.7.0

File Name: P:\CTR530\Air & Noise Modeling\Project.urb
Project Name: WalMart Supercenter at Canyon Crossings
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	3.29	0.00	0.00	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	86.63	151.21	1,060.63	0.53	100.04

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	89.92	151.21	1,060.63	0.53	100.04

URBEMIS 2002 For Windows 8.7.0

File Name: P:\CTR530\Air & Noise Modeling\Project.urb
Project Name: WalMart Supercenter at Canyon Crossings
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.00	0.00	0.00	0	0.00
Hearth	0.00	0.00	0.00	0.00	0.00
Landscaping - No winter emissions					
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	3.29	-	-	-	-
TOTALS(lbs/day,unmitigated)	3.29	0.00	0.00	0.00	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Free-standing discount su	86.63	151.21	1,060.63	0.53	100.04
TOTAL EMISSIONS (lbs/day)	86.63	151.21	1,060.63	0.53	100.04

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 50 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Free-standing discount su		50.14 trips/1000 sq. ft.	235.00	11,782.90
		Sum of Total Trips		11,782.90
		Total Vehicle Miles Traveled		65,937.11

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Free-standing discount superstore				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The natural gas option switch changed from on to off.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2007.

URBEMIS 2002 For Windows 8.7.0

File Name: P:\CTR530\Air & Noise Modeling\Project.urb
Project Name: WalMart Supercenter at Canyon Crossings
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.00	0.00	0.00	0	0.00
Hearth - No summer emissions					
Landscaping	0.12	0.00	0.78	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	3.29	-	-	-	-
TOTALS(lbs/day,unmitigated)	3.42	0.00	0.78	0.00	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Free-standing discount su	79.39	104.62	1,089.05	0.65	100.04
TOTAL EMISSIONS (lbs/day)	79.39	104.62	1,089.05	0.65	100.04

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Free-standing discount su		50.14 trips/1000 sq. ft.	235.00	11,782.90
		Sum of Total Trips		11,782.90
		Total Vehicle Miles Traveled		65,937.11

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Free-standing discount superstore				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The natural gas option switch changed from on to off.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2007.

APPENDIX C

EMFAC MODELING OUTPUT

Title : South Coast AQMD Avg 2006 Annual
Version : Emfac2002 V2.2 Apr 23 2003
Run Date : 10/17/05 10:13:59
Scen Year: 2006 -- Model Years: 1965 to 2006
Season : Annual
Area : South Coast AQMD Dis

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Year:2006 -- Model Years 1965 to 2006 Inclusive -- Annual
Emfac2002 Emission Factors: V2.2 Apr 23 2003

District Average District Average South Coast AQMD

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Total Organic Gases Temperature: 50F Relative Humidity: 30%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0.000	0.000	4.464	5.605	0.000	0.000	0.656
1	1.060	1.293	1.468	2.949	7.490	6.653	1.298
5	0.860	1.057	1.235	2.949	7.490	6.653	1.096
10	0.588	0.732	0.851	2.124	5.035	5.247	0.760
15	0.422	0.532	0.615	1.589	3.529	4.331	0.552
20	0.318	0.405	0.465	1.232	2.578	3.743	0.420
25	0.251	0.323	0.368	0.988	1.963	3.385	0.335
30	0.208	0.269	0.304	0.817	1.556	3.203	0.278
35	0.180	0.235	0.263	0.697	1.285	3.172	0.242
40	0.163	0.214	0.237	0.613	1.105	3.288	0.220
45	0.155	0.204	0.224	0.554	0.988	3.566	0.209
50	0.155	0.204	0.220	0.515	0.920	4.047	0.207
55	0.161	0.213	0.227	0.492	0.891	4.807	0.215
60	0.176	0.233	0.244	0.483	0.897	5.976	0.234
65	0.202	0.268	0.276	0.488	0.939	7.775	0.267

Pollutant Name: Carbon Monoxide Temperature: 50F Relative Humidity: 30%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0.000	0.000	25.342	30.126	0.000	0.000	3.640
1	9.106	13.286	13.154	28.587	59.928	48.874	11.943
5	8.265	11.885	11.923	28.587	59.928	48.874	10.956
10	6.962	9.761	9.447	19.213	39.539	40.128	8.817
15	6.014	8.268	7.789	13.608	27.592	34.682	7.362
20	5.302	7.188	6.642	10.156	20.364	31.551	6.338
25	4.758	6.393	5.831	7.986	15.893	30.211	5.599
30	4.338	5.806	5.254	6.616	13.116	30.449	5.063
35	4.016	5.381	4.852	5.775	11.444	32.307	4.680
40	3.776	5.091	4.593	5.312	10.558	36.091	4.423
45	3.614	4.928	4.466	5.148	10.298	42.458	4.283
50	3.529	4.897	4.474	5.259	10.619	52.605	4.263
55	3.532	5.021	4.641	5.663	11.575	68.652	4.387
60	3.649	5.346	5.019	6.430	13.340	94.375	4.702
65	3.924	5.963	5.702	7.702	16.252	136.659	5.296

Pollutant Name: Oxides of Nitrogen Temperature: 50F Relative Humidity: 30%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0.000	0.000	4.481	66.971	0.000	0.000	3.763
1	0.924	1.475	2.377	18.358	26.362	1.259	2.183
5	0.853	1.356	2.230	18.358	26.362	1.259	2.096
10	0.739	1.166	1.913	15.401	20.714	1.311	1.779
15	0.656	1.028	1.688	13.392	17.150	1.365	1.558
20	0.595	0.929	1.531	12.060	14.923	1.422	1.406
25	0.550	0.860	1.425	11.238	13.606	1.480	1.305
30	0.520	0.813	1.358	10.825	12.961	1.540	1.245
35	0.501	0.784	1.325	10.774	12.871	1.600	1.221
40	0.491	0.772	1.322	11.073	13.305	1.662	1.228
45	0.490	0.774	1.348	11.750	14.317	1.725	1.269
50	0.498	0.793	1.406	12.879	16.053	1.789	1.348
55	0.516	0.827	1.502	14.587	18.796	1.853	1.473
60	0.544	0.881	1.644	17.086	23.045	1.918	1.659
65	0.586	0.960	1.850	20.716	29.674	1.984	1.931

Pollutant Name: Carbon Dioxide Temperature: 50F Relative Humidity: 30%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0.000	0.000	1004.952	3674.188	0.000	0.000	269.808

Title : South Coast Air Basin Avg 2007 Winter
Version : Emfac2002 V2.2 Apr 23 2003
Run Date : 10/11/05 15:34:28
Scen Year: 2007 -- Model Years: 1965 to 2007
Season : Winter
Area : South Coast AB

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Year:2007 -- Model Years 1965 to 2007 Inclusive -- Winter
Emfac2002 Emission Factors: V2.2 Apr 23 2003

South Coast A Basin Average Basin Average

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Total Organic Gases Temperature: 50F Relative Humidity: 30%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	0.957	1.195	1.371	2.675	7.265	6.631	1.191
5	0.776	0.977	1.151	2.675	7.265	6.631	1.007
10	0.529	0.676	0.794	1.933	4.886	5.229	0.698
15	0.380	0.490	0.573	1.451	3.426	4.317	0.507
20	0.286	0.373	0.434	1.128	2.504	3.730	0.386
25	0.225	0.297	0.343	0.907	1.906	3.373	0.307
30	0.186	0.247	0.284	0.752	1.512	3.192	0.256
35	0.161	0.216	0.245	0.642	1.249	3.161	0.223
40	0.146	0.197	0.221	0.565	1.074	3.276	0.202
45	0.139	0.188	0.208	0.511	0.961	3.554	0.192
50	0.139	0.187	0.205	0.475	0.895	4.033	0.191
55	0.145	0.196	0.211	0.454	0.866	4.791	0.198
60	0.158	0.214	0.228	0.446	0.873	5.955	0.216
65	0.181	0.246	0.257	0.450	0.914	7.748	0.246

Pollutant Name: Carbon Monoxide Temperature: 50F Relative Humidity: 30%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	8.333	12.347	12.262	25.449	57.847	48.429	11.023
5	7.577	11.060	11.117	25.449	57.847	48.429	10.126
10	6.402	9.107	8.849	17.114	38.159	39.764	8.169
15	5.543	7.730	7.323	12.128	26.625	34.368	6.835
20	4.896	6.730	6.262	9.054	19.647	31.265	5.893
25	4.398	5.991	5.508	7.121	15.331	29.937	5.213
30	4.012	5.443	4.968	5.899	12.651	30.172	4.717
35	3.714	5.044	4.588	5.148	11.038	32.013	4.361
40	3.490	4.770	4.341	4.733	10.182	35.761	4.121
45	3.336	4.612	4.215	4.584	9.931	42.069	3.987
50	3.251	4.575	4.213	4.680	10.240	52.121	3.966
55	3.245	4.679	4.358	5.035	11.162	68.019	4.076
60	3.340	4.968	4.695	5.711	12.863	93.503	4.362
65	3.576	5.523	5.311	6.833	15.671	135.396	4.907

Pollutant Name: Oxides of Nitrogen Temperature: 50F Relative Humidity: 30%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	0.843	1.372	2.238	17.011	25.875	1.264	2.050
5	0.778	1.262	2.100	17.011	25.875	1.264	1.970
10	0.675	1.085	1.801	14.263	20.327	1.317	1.671
15	0.599	0.958	1.589	12.396	16.826	1.371	1.463
20	0.543	0.866	1.441	11.157	14.638	1.428	1.320
25	0.503	0.801	1.341	10.391	13.344	1.486	1.225
30	0.475	0.757	1.277	10.007	12.710	1.546	1.169
35	0.457	0.730	1.245	9.957	12.620	1.607	1.146
40	0.448	0.718	1.242	10.233	13.046	1.669	1.153
45	0.447	0.720	1.266	10.860	14.039	1.733	1.192
50	0.454	0.736	1.320	11.906	15.744	1.796	1.266
55	0.470	0.768	1.410	13.491	18.436	1.861	1.385
60	0.495	0.818	1.543	15.809	22.608	1.926	1.561
65	0.532	0.890	1.736	19.177	29.118	1.992	1.819

Pollutant Name: Carbon Dioxide Temperature: 50F Relative Humidity: 30%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	1131.867	1373.098	1902.905	2056.298	2652.403	226.628	1317.239
5	970.424	1177.589	1694.985	2056.298	2652.403	226.628	1151.589
10	733.546	890.728	1252.031	1921.757	2261.514	193.534	888.339
15	575.528	699.368	967.099	1842.306	2030.680	168.020	714.257

Title : South Coast Air Basin Avg 2025 Winter
Version : Emfac2002 V2.2 Apr 23 2003
Run Date : 05/11/06 16:17:07
Scen Year: 2025 -- Model Years: 1980 to 2025
Season : Winter
Area : South Coast AB

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Year:2025 -- Model Years 1980 to 2025 Inclusive -- Winter
Emfac2002 Emission Factors: V2.2 Apr 23 2003

South Coast A Basin Average Basin Average

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Total Organic Gases Temperature: 50F Relative Humidity: 30%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	0.150	0.255	0.367	0.590	3.928	5.344	0.253
5	0.120	0.204	0.301	0.590	3.928	5.344	0.216
10	0.079	0.136	0.204	0.453	2.648	4.062	0.149
15	0.055	0.096	0.145	0.357	1.860	3.248	0.108
20	0.040	0.070	0.108	0.289	1.362	2.731	0.082
25	0.031	0.055	0.085	0.240	1.040	2.413	0.065
30	0.025	0.044	0.069	0.204	0.826	2.241	0.054
35	0.021	0.038	0.059	0.178	0.683	2.185	0.047
40	0.019	0.034	0.053	0.159	0.589	2.238	0.043
45	0.018	0.032	0.050	0.145	0.527	2.406	0.041
50	0.017	0.031	0.049	0.135	0.492	2.716	0.041
55	0.018	0.032	0.050	0.130	0.477	3.218	0.043
60	0.020	0.034	0.053	0.127	0.481	4.004	0.047
65	0.022	0.039	0.060	0.127	0.504	5.229	0.055

Pollutant Name: Carbon Monoxide Temperature: 50F Relative Humidity: 30%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	1.433	2.594	3.137	5.056	22.663	26.144	2.263
5	1.357	2.440	2.952	5.056	22.663	26.144	2.161
10	1.222	2.172	2.553	3.453	14.879	22.133	1.844
15	1.107	1.951	2.250	2.475	10.338	19.483	1.610
20	1.008	1.765	2.011	1.861	7.600	17.799	1.431
25	0.922	1.607	1.818	1.468	5.912	16.868	1.290
30	0.847	1.474	1.660	1.215	4.865	16.600	1.177
35	0.782	1.359	1.530	1.055	4.235	17.008	1.087
40	0.726	1.262	1.423	0.961	3.899	18.207	1.015
45	0.676	1.179	1.335	0.919	3.797	20.451	0.961
50	0.633	1.109	1.267	0.922	3.911	24.209	0.923
55	0.595	1.051	1.217	0.970	4.260	30.312	0.905
60	0.563	1.004	1.188	1.073	4.908	40.242	0.911
65	0.536	0.970	1.185	1.246	5.979	56.707	0.952

Pollutant Name: Oxides of Nitrogen Temperature: 50F Relative Humidity: 30%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	0.160	0.365	0.606	2.436	14.636	1.433	0.441
5	0.148	0.335	0.566	2.436	14.636	1.433	0.422
10	0.128	0.286	0.484	2.038	11.610	1.372	0.356
15	0.112	0.250	0.425	1.766	9.708	1.332	0.310
20	0.101	0.223	0.383	1.586	8.527	1.309	0.278
25	0.092	0.204	0.353	1.474	7.838	1.301	0.256
30	0.086	0.190	0.333	1.418	7.511	1.305	0.242
35	0.082	0.180	0.322	1.409	7.483	1.320	0.236
40	0.079	0.175	0.318	1.448	7.738	1.346	0.236
45	0.078	0.174	0.322	1.538	8.305	1.383	0.242
50	0.078	0.176	0.333	1.688	9.263	1.431	0.256
55	0.080	0.182	0.353	1.915	10.763	1.492	0.279
60	0.084	0.193	0.384	2.249	13.077	1.566	0.315
65	0.089	0.209	0.429	2.735	16.674	1.657	0.367

Pollutant Name: Carbon Dioxide Temperature: 50F Relative Humidity: 30%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	1102.604	1385.695	1902.828	2063.164	2502.765	265.692	1303.521
5	945.203	1187.956	1686.426	2063.164	2502.765	265.692	1139.785
10	714.257	897.823	1248.854	1957.081	2098.838	221.560	882.317
15	560.196	704.280	966.147	1894.435	1860.306	190.334	711.867

APPENDIX D

CALINE4 MODELING OUTPUT

SUPERCENTER AT CANYON CROSSINGS

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

EXISTING BASELINE CONDITIONS

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: Existing-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valley S NBA	*	7	-150	7	0	* AG	140	8.5	.0	10.0
B. Valley S NBD	*	7	0	7	150	* AG	0	5.3	.0	10.0
C. Valley S NBL	*	5	-150	0	0	* AG	196	10.9	.0	10.0
D. Valley S SBA	*	-7	150	-7	0	* AG	75	8.5	.0	10.0
E. Valley S SBD	*	-7	0	-7	-150	* AG	346	5.7	.0	10.0
F. Valley S SBL	*	-5	150	0	0	* AG	41	10.9	.0	10.0
G. Corporat EBA	*	-150	-2	0	-2	* AG	205	8.5	.0	10.0
H. Corporat EBD	*	0	-2	150	-2	* AG	249	5.7	.0	10.0
I. Corporat EBL	*	-150	-2	0	0	* AG	0	5.3	.0	10.0
J. Corporat WBA	*	150	7	0	7	* AG	99	8.5	.0	10.0
K. Corporat WBD	*	0	7	-150	7	* AG	295	5.7	.0	10.0
L. Corporat WBL	*	150	5	0	0	* AG	134	10.9	.0	10.0
M. Valley NBAX	*	7	-750	7	-150	* AG	336	5.3	.0	10.0
N. Valley NBDX	*	7	150	7	750	* AG	0	5.3	.0	10.0
O. Valley SBAX	*	-7	750	-7	150	* AG	116	5.3	.0	10.0
P. Valley SBDX	*	-7	-150	-7	-750	* AG	346	5.3	.0	10.0
Q. Corpora EBAX	*	-750	-2	-150	-2	* AG	205	5.3	.0	10.0
R. Corpora EBDX	*	150	-2	750	-2	* AG	249	5.3	.0	10.0
S. Corpora WBAX	*	750	7	150	7	* AG	233	5.3	.0	10.0
T. Corpora WBDX	*	-150	7	-750	7	* AG	295	5.3	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: Existing-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	14	-8	1.8
2. NW	*	-14	14	1.8
3. SW	*	-14	-8	1.8
4. NE	*	14	14	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	14	-150	1.8
10. NW mdblk	*	-14	150	1.8
11. SW mdblk	*	-14	-150	1.8
12. NE mdblk	*	14	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	14	-600	1.8
18. NW blk	*	-14	600	1.8
19. SW blk	*	-14	-600	1.8
20. NE blk	*	14	600	1.8

JOB: Riverside Walmart Supercenter
RUN: Existing-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.8	.0	.0	.1	.0	.0	.0	.3	.0
2. NW	172.	.8	.0	.0	.2	.0	.3	.0	.0	.0
3. SW	82.	.9	.0	.0	.1	.0	.1	.0	.0	.2
4. NE	187.	.8	.2	.0	.2	.0	.0	.0	.0	.0
5. ES mdblk	276.	.6	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	97.	.6	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	85.	.6	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	262.	.7	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	349.	.7	.2	.0	.3	.0	.1	.0	.0	.0
10. NW mdblk	175.	.5	.0	.0	.0	.1	.0	.0	.0	.0
11. SW mdblk	11.	.6	.0	.0	.2	.0	.3	.0	.0	.0
12. NE mdblk	184.	.4	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.5	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.5	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.6	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	177.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.6	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	183.	.2	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: Existing-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0
17. SE blk	*	.0	.0	.0	.0	.3	.0	.0	.1	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.3	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: Existing-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valley S NBA	*	7	-150	7	0	* AG	188	10.0	.0	10.0
B. Valley S NBD	*	7	0	7	150	* AG	364	6.1	.0	10.0
C. Valley S NBL	*	5	-150	0	0	* AG	87	10.9	.0	10.0
D. Valley S SBA	*	-9	150	-9	0	* AG	739	12.0	.0	13.5
E. Valley S SBD	*	-9	0	-9	-150	* AG	181	6.1	.0	10.0
F. Valley S SBL	*	-5	150	0	0	* AG	43	10.9	.0	10.0
G. Eucalypt EBA	*	-150	-12	0	-12	* AG	763	8.1	.0	13.5
H. Eucalypt EBD	*	0	-12	150	-12	* AG	831	5.6	.0	10.0
I. Eucalypt EBL	*	-150	-9	0	0	* AG	224	10.9	.0	10.0
J. Eucalypt WBA	*	150	9	0	9	* AG	689	8.1	.0	13.5
K. Eucalypt WBD	*	0	9	-150	9	* AG	1396	5.9	.0	10.0
L. Eucalypt WBL	*	150	5	0	0	* AG	39	10.9	.0	10.0
M. Valley NBAX	*	7	-750	7	-150	* AG	275	5.3	.0	10.0
N. Valley NBDX	*	7	150	7	750	* AG	364	5.3	.0	10.0
O. Valley SBAX	*	-9	750	-9	150	* AG	782	5.3	.0	13.5
P. Valley SBDX	*	-9	-150	-9	-750	* AG	181	5.3	.0	10.0
Q. Eucalyp EBAX	*	-750	-12	-150	-12	* AG	987	5.3	.0	13.5
R. Eucalyp EBDX	*	150	-12	750	-12	* AG	831	5.3	.0	10.0
S. Eucalyp WBAX	*	750	9	150	9	* AG	728	5.3	.0	13.5
T. Eucalyp WBDX	*	-150	9	-750	9	* AG	1396	5.3	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: Existing-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	14	-19	1.8
2. NW	*	-17	15	1.8
3. SW	*	-15	-21	1.8
4. NE	*	14	17	1.8
5. ES mdblk	*	150	-19	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-21	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	14	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	14	150	1.8
13. ES blk	*	600	-19	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-21	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	14	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	14	600	1.8

JOB: Riverside Walmart Supercenter
RUN: Existing-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.8	.1	.0	.0	.0	.0	.0	.8	.1
2. NW	98.	2.0	.0	.0	.0	.6	.0	.0	.0	.1
3. SW	6.	2.1	.0	.0	.0	1.0	.0	.0	.4	.0
4. NE	260.	2.1	.0	.2	.0	.3	.0	.0	.2	.0
5. ES mdblk	277.	1.5	.0	.0	.0	.0	.0	.0	.1	.7
6. WN mdblk	98.	1.9	.0	.0	.0	.0	.0	.0	.1	.1
7. WS mdblk	80.	1.7	.0	.0	.0	.0	.0	.0	.9	.0
8. EN mdblk	264.	1.6	.0	.0	.0	.0	.0	.0	.2	.0
9. SE mdblk	353.	1.1	.3	.0	.1	.2	.0	.0	.0	.0
10. NW mdblk	171.	1.7	.0	.0	.0	1.2	.0	.0	.0	.0
11. SW mdblk	5.	.9	.0	.0	.0	.2	.2	.0	.0	.0
12. NE mdblk	194.	1.2	.0	.3	.0	.5	.0	.0	.0	.0
13. ES blk	276.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.7	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	82.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.6	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.9	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: Existing-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.2	.0	.2	.0	.0	.0	.0	.0	.1	.0	.0	.3
2. NW	*	.0	.6	.3	.0	.0	.0	.0	.0	.0	.2	.0	.0
3. SW	*	.1	.0	.2	.0	.0	.0	.1	.0	.0	.0	.0	.0
4. NE	*	.2	.1	.9	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	*	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	*	.1	.0	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.2	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.7	.2	.0	.0	.0	.0	.0	.1	.0	.0	.1
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.2	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	1.1
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.3
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.6	.0
17. SE blk	*	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.1	.7	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.4	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Old 215 NBA	*	9	-150	9	0	* AG	155	8.5	.0	13.5
B. Old 215 NBD	*	9	0	9	150	* AG	523	5.8	.0	10.0
C. Old 215 NBL	*	5	-150	0	0	* AG	73	10.9	.0	10.0
D. Old 215 SBA	*	-9	150	-9	0	* AG	209	8.5	.0	13.5
E. Old 215 SBD	*	-9	0	-9	-150	* AG	87	5.7	.0	10.0
F. Old 215 SBL	*	-5	150	0	0	* AG	36	10.9	.0	10.0
G. Alessand EBA	*	-150	-9	0	-9	* AG	1553	11.5	.0	13.5
H. Alessand EBD	*	0	-9	150	-9	* AG	1583	7.7	.0	10.0
I. Alessand EBL	*	-150	-5	0	0	* AG	300	11.8	.0	10.0
J. Alessand WBA	*	150	9	0	9	* AG	1195	9.9	.0	13.5
K. Alessand WBD	*	0	9	-150	9	* AG	1339	6.6	.0	10.0
L. Alessand WBL	*	150	5	0	0	* AG	11	10.9	.0	10.0
M. Old 215 NBAX	*	9	-750	9	-150	* AG	228	5.3	.0	13.5
N. Old 215 NBDX	*	9	150	9	750	* AG	523	5.3	.0	10.0
O. Old 215 SBAX	*	-9	750	-9	150	* AG	245	5.3	.0	13.5
P. Old 215 SBDX	*	-9	-150	-9	-750	* AG	87	5.3	.0	10.0
Q. Alessan EBAX	*	-750	-9	-150	-9	* AG	1853	5.3	.0	13.5
R. Alessan EBDX	*	150	-9	750	-9	* AG	1583	5.3	.0	10.0
S. Alessan WBAX	*	750	9	150	9	* AG	1206	5.3	.0	13.5
T. Alessan WBDX	*	-150	9	-750	9	* AG	1339	5.3	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	17	-15	1.8
2. NW	*	-17	15	1.8
3. SW	*	-15	-17	1.8
4. NE	*	15	17	1.8
5. ES mdblk	*	150	-15	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	15	150	1.8
13. ES blk	*	600	-15	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	15	600	1.8

JOB: Riverside Walmart Supercenter
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	3.4	.0	.0	.0	.0	.0	.0	1.9	.4
2. NW	98.	2.6	.0	.1	.0	.1	.0	.0	.0	.3
3. SW	279.	3.2	.0	.0	.0	.0	.0	.0	2.3	.0
4. NE	257.	2.8	.0	.2	.0	.0	.0	.0	.8	.0
5. ES mdblk	277.	2.8	.0	.0	.0	.0	.0	.0	.3	1.6
6. WN mdblk	100.	2.6	.0	.0	.0	.0	.0	.0	.6	.2
7. WS mdblk	81.	3.5	.0	.0	.0	.0	.0	.0	2.3	.1
8. EN mdblk	262.	2.8	.0	.0	.0	.0	.0	.0	.4	.2
9. SE mdblk	353.	.9	.2	.0	.0	.0	.0	.0	.1	.0
10. NW mdblk	172.	.9	.0	.0	.0	.3	.0	.0	.0	.1
11. SW mdblk	5.	.8	.0	.0	.0	.0	.0	.0	.2	.0
12. NE mdblk	189.	1.1	.0	.5	.0	.0	.0	.0	.2	.0
13. ES blk	277.	2.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.9	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	2.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	1.7	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.6	.0	.0	.0	.0	.0	.0	.1	.0
18. NW blk	174.	.7	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.9	.0	.0	.0	.0	.0	.0	.1	.0

JOB: Riverside Walmart Supercenter
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.3	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	.3
2. NW	*	.0	1.3	.3	.0	.0	.0	.0	.0	.0	.3	.1	.0
3. SW	*	.2	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	.3
4. NE	*	.3	.5	.8	.0	.0	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	*	.1	.3	.2	.0	.0	.0	.0	.0	.1	.0	.0	.1
6. WN mdblk	*	.2	.0	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.3	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.1	1.6	.1	.0	.0	.0	.0	.0	.2	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.4	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	1.1
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.0	.0	.4
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	1.0	.0
17. SE blk	*	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: Existing-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	12	-150	12	0	* AG	721	7.9	.0	13.5
B. Day Stre NBD	*	12	0	12	150	* AG	1030	5.6	.0	11.8
C. Day Stre NBL	*	9	-150	0	0	* AG	196	10.9	.0	10.0
D. Day Stre SBA	*	-14	150	-14	0	* AG	710	7.9	.0	17.0
E. Day Stre SBD	*	-14	0	-14	-150	* AG	869	5.6	.0	13.5
F. Day Stre SBL	*	-9	150	0	0	* AG	268	10.9	.0	10.0
G. Campus P EBA	*	-150	-9	0	-9	* AG	224	10.4	.0	10.0
H. Campus P EBD	*	0	-9	150	-9	* AG	442	9.3	.0	10.0
I. Campus P EBL	*	-150	-9	0	0	* AG	194	10.9	.0	10.0
J. Campus P WBA	*	150	9	0	9	* AG	362	10.0	.0	13.5
K. Campus P WBD	*	0	9	-150	9	* AG	406	6.4	.0	10.0
L. Campus P WBL	*	150	5	0	0	* AG	72	10.9	.0	10.0
M. Day Str NBAX	*	12	-750	12	-150	* AG	917	5.3	.0	13.5
N. Day Str NBDX	*	12	150	12	750	* AG	1030	5.3	.0	11.8
O. Day Str SBAX	*	-14	750	-14	150	* AG	978	5.3	.0	17.0
P. Day Str SBDX	*	-14	-150	-14	-750	* AG	869	5.3	.0	13.5
Q. Campus EBAX	*	-750	-9	-150	-9	* AG	418	5.3	.0	10.0
R. Campus EBDX	*	150	-9	750	-9	* AG	442	5.3	.0	10.0
S. Campus WBAX	*	750	9	150	9	* AG	434	5.3	.0	13.5
T. Campus WBDX	*	-150	9	-750	9	* AG	406	5.3	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: Existing-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	21	-15	1.8
2. NW	*	-24	15	1.8
3. SW	*	-22	-15	1.8
4. NE	*	20	17	1.8
5. ES mdblk	*	150	-15	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-15	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	21	-150	1.8
10. NW mdblk	*	-24	150	1.8
11. SW mdblk	*	-22	-150	1.8
12. NE mdblk	*	20	150	1.8
13. ES blk	*	600	-15	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-15	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	21	-600	1.8
18. NW blk	*	-24	600	1.8
19. SW blk	*	-22	-600	1.8
20. NE blk	*	20	600	1.8

JOB: Riverside Walmart Supercenter
RUN: Existing-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	350.	1.8	.2	.6	.0	.1	.0	.1	.0	.3
2. NW	98.	1.5	.0	.2	.0	.3	.0	.1	.0	.2
3. SW	8.	1.7	.0	.0	.0	.6	.1	.2	.2	.0
4. NE	188.	1.8	.6	.2	.1	.0	.0	.0	.0	.1
5. ES mdblk	278.	1.3	.0	.0	.0	.0	.0	.0	.0	.6
6. WN mdblk	97.	1.1	.0	.0	.0	.0	.0	.0	.0	.1
7. WS mdblk	82.	1.3	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	262.	1.2	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	352.	1.6	.8	.0	.2	.2	.0	.0	.0	.0
10. NW mdblk	170.	1.5	.2	.0	.0	.7	.0	.2	.0	.0
11. SW mdblk	8.	1.4	.0	.1	.0	.0	.7	.0	.0	.0
12. NE mdblk	188.	1.6	.0	.8	.0	.0	.1	.1	.0	.0
13. ES blk	276.	.8	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.8	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.8	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.8	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	1.4	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: Existing-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.1	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
2. NW	*	.0	.4	.1	.0	.0	.0	.0	.0	.0	.1	.0	.0
3. SW	*	.1	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0
4. NE	*	.0	.2	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
5. ES mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.2	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.4
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.4	.0
17. SE blk	*	.0	.0	.0	.0	.8	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.7	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.7	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.9	.2	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	9	-150	9	0	* AG	463	8.7	.0	13.5
B. Day Stre NBD	*	9	0	9	150	* AG	782	5.8	.0	10.0
C. Day Stre NBL	*	5	-150	0	0	* AG	54	10.9	.0	10.0
D. Day Stre SBA	*	-9	150	-9	0	* AG	825	9.3	.0	13.5
E. Day Stre SBD	*	-9	0	-9	-150	* AG	562	5.8	.0	10.0
F. Day Stre SBL	*	-5	150	0	0	* AG	163	10.9	.0	10.0
G. Eucalypt EBA	*	-150	-9	0	-9	* AG	594	8.7	.0	13.5
H. Eucalypt EBD	*	0	-9	150	-9	* AG	708	5.8	.0	10.0
I. Eucalypt EBL	*	-150	-5	0	0	* AG	253	11.8	.0	10.0
J. Eucalypt WBA	*	150	9	0	9	* AG	494	8.7	.0	13.5
K. Eucalypt WBD	*	0	9	-150	9	* AG	816	5.9	.0	10.0
L. Eucalypt WBL	*	150	5	0	0	* AG	22	10.9	.0	10.0
M. Day Str NBAX	*	9	-750	9	-150	* AG	517	5.3	.0	13.5
N. Day Str NBDX	*	9	150	9	750	* AG	782	5.3	.0	10.0
O. Day Str SBAX	*	-9	750	-9	150	* AG	988	5.3	.0	13.5
P. Day Str SBDX	*	-9	-150	-9	-750	* AG	562	5.3	.0	10.0
Q. Eucalyp EBAX	*	-750	-9	-150	-9	* AG	847	5.3	.0	13.5
R. Eucalyp EBDX	*	150	-9	750	-9	* AG	708	5.3	.0	10.0
S. Eucalyp WBAX	*	750	9	150	9	* AG	516	5.3	.0	13.5
T. Eucalyp WBDX	*	-150	9	-750	9	* AG	816	5.3	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	17	-15	1.8
2. NW	*	-17	15	1.8
3. SW	*	-15	-17	1.8
4. NE	*	15	17	1.8
5. ES mdblk	*	150	-15	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	15	150	1.8
13. ES blk	*	600	-15	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	15	600	1.8

JOB: Riverside Walmart Supercenter
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.8	.3	.0	.0	.0	.1	.0	.6	.2
2. NW	98.	1.8	.0	.2	.0	.5	.0	.0	.0	.1
3. SW	7.	2.2	.0	.1	.0	.9	.1	.1	.3	.0
4. NE	260.	1.9	.0	.3	.0	.3	.0	.0	.2	.0
5. ES mdblk	277.	1.4	.0	.0	.0	.0	.0	.0	.0	.6
6. WN mdblk	98.	1.5	.0	.0	.0	.0	.0	.0	.2	.1
7. WS mdblk	80.	1.6	.0	.0	.0	.0	.0	.0	.7	.0
8. EN mdblk	263.	1.4	.0	.0	.0	.0	.0	.0	.2	.0
9. SE mdblk	353.	1.4	.6	.0	.0	.2	.0	.0	.0	.0
10. NW mdblk	171.	1.8	.1	.1	.0	1.1	.0	.2	.0	.0
11. SW mdblk	6.	1.3	.0	.1	.0	.2	.5	.0	.0	.0
12. NE mdblk	190.	1.5	.0	.7	.0	.3	.0	.1	.0	.0
13. ES blk	276.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.9	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.9	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	1.3	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.2
2. NW	*	.0	.5	.2	.0	.0	.0	.0	.0	.0	.2	.0	.0
3. SW	*	.1	.0	.2	.0	.0	.2	.1	.0	.0	.0	.0	.0
4. NE	*	.2	.1	.5	.0	.0	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	*	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.2	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.3	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.6	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.2	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.7
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.2
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.5	.0
17. SE blk	*	.0	.0	.0	.0	.5	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.8	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.5	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.7	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	2	-150	2	0	* AG	316	8.9	.0	10.0
B. Day Stre NBD	*	2	0	2	150	* AG	451	5.9	.0	10.0
C. Day Stre NBL	*	2	-150	0	0	* AG	13	10.9	.0	10.0
D. Day Stre SBA	*	-2	150	-2	0	* AG	298	8.7	.0	10.0
E. Day Stre SBD	*	-2	0	-2	-150	* AG	315	5.8	.0	10.0
F. Day Stre SBL	*	-2	150	0	0	* AG	162	10.9	.0	10.0
G. Cottonwo EBA	*	-150	-5	0	-5	* AG	131	8.5	.0	10.0
H. Cottonwo EBD	*	0	-5	150	-5	* AG	296	5.8	.0	10.0
I. Cottonwo EBL	*	-150	-5	0	0	* AG	32	10.9	.0	10.0
J. Cottonwo WBA	*	150	7	0	7	* AG	210	8.7	.0	10.0
K. Cottonwo WBD	*	0	7	-150	7	* AG	123	5.7	.0	10.0
L. Cottonwo WBL	*	150	5	0	0	* AG	23	10.9	.0	10.0
M. Day Str NBAX	*	2	-750	2	-150	* AG	329	5.3	.0	10.0
N. Day Str NBDX	*	2	150	2	750	* AG	451	5.3	.0	10.0
O. Day Str SBAX	*	-2	750	-2	150	* AG	460	5.3	.0	10.0
P. Day Str SBDX	*	-2	-150	-2	-750	* AG	315	5.3	.0	10.0
Q. Cottonw EBAX	*	-750	-5	-150	-5	* AG	163	5.3	.0	10.0
R. Cottonw EBDX	*	150	-5	750	-5	* AG	296	5.3	.0	10.0
S. Cottonw WBAX	*	750	7	150	7	* AG	233	5.3	.0	10.0
T. Cottonw WBDX	*	-150	7	-750	7	* AG	123	5.3	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-12	1.8
2. NW	*	-8	14	1.8
3. SW	*	-8	-12	1.8
4. NE	*	8	14	1.8
5. ES mdblk	*	150	-12	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-12	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-12	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-12	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Riverside Walmart Supercenter
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	353.	1.3	.0	.4	.0	.3	.0	.2	.0	.1
2. NW	7.	1.1	.0	.2	.0	.4	.0	.2	.0	.0
3. SW	7.	1.2	.0	.3	.0	.4	.0	.2	.0	.0
4. NE	352.	1.1	.0	.4	.0	.3	.0	.2	.0	.0
5. ES mdblk	278.	.6	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	95.	.5	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	84.	.6	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	263.	.6	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	355.	1.0	.4	.0	.0	.0	.2	.0	.0	.0
10. NW mdblk	173.	1.2	.0	.3	.0	.4	.0	.3	.0	.0
11. SW mdblk	6.	.9	.3	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	187.	1.1	.0	.4	.0	.3	.0	.2	.0	.0
13. ES blk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.7	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.9	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.7	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.9	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0
17. SE blk	*	.0	.0	.0	.0	.3	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.3	.4	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.3	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.4	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: Existing-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	5	-150	5	0	* AG	42	10.0	.0	10.0
B. Day Stre NBD	*	5	0	5	150	* AG	498	9.3	.0	10.0
C. Day Stre NBL	*	5	-150	0	0	* AG	45	10.9	.0	10.0
D. Day Stre SBA	*	-5	150	-5	0	* AG	161	10.0	.0	10.0
E. Day Stre SBD	*	-5	0	-5	-150	* AG	15	6.1	.0	10.0
F. Day Stre SBL	*	-5	150	0	0	* AG	185	10.9	.0	10.0
G. Alessand EBA	*	-150	-9	0	-9	* AG	1492	8.4	.0	13.5
H. Alessand EBD	*	0	-9	150	-9	* AG	1700	5.7	.0	11.8
I. Alessand EBL	*	-150	-5	0	0	* AG	322	12.0	.0	10.0
J. Alessand WBA	*	150	7	0	7	* AG	1183	8.7	.0	10.0
K. Alessand WBD	*	0	7	-150	7	* AG	1223	5.9	.0	10.0
L. Alessand WBL	*	150	5	0	0	* AG	6	10.9	.0	10.0
M. Day Str NBAX	*	5	-750	5	-150	* AG	87	5.3	.0	10.0
N. Day Str NBDX	*	5	150	5	750	* AG	498	5.3	.0	10.0
O. Day Str SBAX	*	-5	750	-5	150	* AG	346	5.3	.0	10.0
P. Day Str SBDX	*	-5	-150	-5	-750	* AG	15	5.3	.0	10.0
Q. Alessan EBAX	*	-750	-9	-150	-9	* AG	1814	5.3	.0	13.5
R. Alessan EBDX	*	150	-9	750	-9	* AG	1700	5.3	.0	11.8
S. Alessan WBAX	*	750	7	150	7	* AG	1189	5.3	.0	10.0
T. Alessan WBDX	*	-150	7	-750	7	* AG	1223	5.3	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: Existing-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	12	-16	1.8
2. NW	*	-12	14	1.8
3. SW	*	-12	-17	1.8
4. NE	*	12	14	1.8
5. ES mdblk	*	150	-16	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	12	-150	1.8
10. NW mdblk	*	-12	150	1.8
11. SW mdblk	*	-12	-150	1.8
12. NE mdblk	*	12	150	1.8
13. ES blk	*	600	-16	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	12	-600	1.8
18. NW blk	*	-12	600	1.8
19. SW blk	*	-12	-600	1.8
20. NE blk	*	12	600	1.8

JOB: Riverside Walmart Supercenter
RUN: Existing-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	2.6	.0	.0	.0	.0	.0	.0	1.5	.2
2. NW	98.	2.6	.0	.2	.0	.1	.0	.1	.0	.3
3. SW	279.	2.5	.0	.0	.0	.0	.0	.0	1.6	.0
4. NE	260.	2.8	.0	.3	.0	.0	.0	.1	.5	.0
5. ES mdblk	277.	2.3	.0	.0	.0	.0	.0	.0	.2	1.3
6. WN mdblk	98.	2.2	.0	.0	.0	.0	.0	.0	.4	.2
7. WS mdblk	81.	2.8	.0	.0	.0	.0	.0	.0	1.6	.0
8. EN mdblk	263.	2.5	.0	.0	.0	.0	.0	.0	.3	.2
9. SE mdblk	356.	.8	.0	.1	.0	.0	.0	.0	.0	.0
10. NW mdblk	169.	1.2	.0	.3	.0	.3	.0	.3	.0	.1
11. SW mdblk	3.	.8	.0	.1	.0	.0	.0	.0	.1	.0
12. NE mdblk	191.	1.4	.0	.7	.0	.1	.0	.2	.2	.0
13. ES blk	277.	2.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.8	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	2.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	1.8	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	357.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.8	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	2.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.9	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: Existing-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.3	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	.2
2. NW	*	.0	1.3	.2	.0	.0	.0	.0	.0	.0	.3	.1	.0
3. SW	*	.3	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	.3
4. NE	*	.3	.3	.8	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	*	.1	.2	.2	.0	.0	.0	.0	.0	.1	.0	.0	.1
6. WN mdblk	*	.2	.1	1.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
7. WS mdblk	*	.3	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.1	1.4	.1	.0	.0	.0	.0	.0	.2	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.4	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	1.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.0	.0	.4
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	1.0	.0
17. SE blk	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.3	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.5	.2	.0	.0	.0	.0	.0

SUPERCENTER AT CANYON CROSSINGS

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

EXISTING WITH PROJECT CONDITIONS

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: ExistwP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valley S NBA	*	7	-150	7	0	* AG	418	8.7	.0	10.0
B. Valley S NBD	*	7	0	7	150	* AG	298	5.7	.0	10.0
C. Valley S NBL	*	5	-150	0	0	* AG	196	10.9	.0	10.0
D. Valley S SBA	*	-7	150	-7	0	* AG	343	8.5	.0	10.0
E. Valley S SBD	*	-7	0	-7	-150	* AG	629	5.8	.0	10.0
F. Valley S SBL	*	-5	150	0	0	* AG	70	10.9	.0	10.0
G. Corporat EBA	*	-150	-2	0	-2	* AG	205	8.5	.0	10.0
H. Corporat EBD	*	0	-2	150	-2	* AG	287	5.7	.0	10.0
I. Corporat EBL	*	-150	-2	0	0	* AG	0	5.3	.0	10.0
J. Corporat WBA	*	150	7	0	7	* AG	128	8.5	.0	10.0
K. Corporat WBD	*	0	7	-150	7	* AG	295	5.7	.0	10.0
L. Corporat WBL	*	150	5	0	0	* AG	149	10.9	.0	10.0
M. Valley NBAX	*	7	-750	7	-150	* AG	614	5.3	.0	10.0
N. Valley NBDX	*	7	150	7	750	* AG	298	5.3	.0	10.0
O. Valley SBAX	*	-7	750	-7	150	* AG	413	5.3	.0	10.0
P. Valley SBDX	*	-7	-150	-7	-750	* AG	629	5.3	.0	10.0
Q. Corpora EBAX	*	-750	-2	-150	-2	* AG	205	5.3	.0	10.0
R. Corpora EBDX	*	150	-2	750	-2	* AG	287	5.3	.0	10.0
S. Corpora WBAX	*	750	7	150	7	* AG	277	5.3	.0	10.0
T. Corpora WBDX	*	-150	7	-750	7	* AG	295	5.3	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: ExistwP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	14	-8	1.8
2. NW	*	-14	14	1.8
3. SW	*	-14	-8	1.8
4. NE	*	14	14	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	14	-150	1.8
10. NW mdblk	*	-14	150	1.8
11. SW mdblk	*	-14	-150	1.8
12. NE mdblk	*	14	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	14	-600	1.8
18. NW blk	*	-14	600	1.8
19. SW blk	*	-14	-600	1.8
20. NE blk	*	14	600	1.8

JOB: Riverside Walmart Supercenter
RUN: ExistwP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	188.	1.1	.6	.0	.2	.0	.1	.0	.0	.0
2. NW	172.	1.3	.2	.0	.2	.0	.5	.0	.0	.0
3. SW	82.	1.2	.1	.0	.1	.0	.2	.0	.0	.2
4. NE	187.	1.3	.5	.0	.2	.0	.1	.0	.0	.0
5. ES mdblk	277.	.8	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	96.	.7	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	85.	.7	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	262.	.8	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	352.	1.3	.6	.0	.3	.0	.1	.0	.0	.0
10. NW mdblk	174.	1.1	.1	.0	.0	.4	.0	.1	.0	.0
11. SW mdblk	8.	1.1	.2	.0	.1	.0	.6	.0	.0	.0
12. NE mdblk	186.	.9	.0	.3	.0	.0	.1	.0	.0	.0
13. ES blk	275.	.6	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.5	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.9	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.7	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.6	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: ExistwP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
2. NW	*	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.3	.0
17. SE blk	*	.0	.0	.0	.0	.6	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.1	.4	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.6	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.3	.2	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: ExistwP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valley S NBA	*	7	-150	7	0	* AG	244	10.0	.0	10.0
B. Valley S NBD	*	7	0	7	150	* AG	642	7.0	.0	10.0
C. Valley S NBL	*	5	-150	0	0	* AG	87	10.9	.0	10.0
D. Valley S SBA	*	-9	150	-9	0	* AG	1022	12.0	.0	13.5
E. Valley S SBD	*	-9	0	-9	-150	* AG	238	6.4	.0	10.0
F. Valley S SBL	*	-5	150	0	0	* AG	43	10.9	.0	10.0
G. Eucalypt EBA	*	-150	-12	0	-12	* AG	763	8.1	.0	13.5
H. Eucalypt EBD	*	0	-12	150	-12	* AG	831	5.6	.0	10.0
I. Eucalypt EBL	*	-150	-9	0	0	* AG	446	11.8	.0	10.0
J. Eucalypt WBA	*	150	9	0	9	* AG	689	8.1	.0	13.5
K. Eucalypt WBD	*	0	9	-150	9	* AG	1622	6.8	.0	10.0
L. Eucalypt WBL	*	150	5	0	0	* AG	39	10.9	.0	10.0
M. Valley NBAX	*	7	-750	7	-150	* AG	331	5.3	.0	10.0
N. Valley NBDX	*	7	150	7	750	* AG	642	5.3	.0	10.0
O. Valley SBAX	*	-9	750	-9	150	* AG	1065	5.3	.0	13.5
P. Valley SBDX	*	-9	-150	-9	-750	* AG	238	5.3	.0	10.0
Q. Eucalyp EBAX	*	-750	-12	-150	-12	* AG	1209	5.3	.0	13.5
R. Eucalyp EBDX	*	150	-12	750	-12	* AG	831	5.3	.0	10.0
S. Eucalyp WBAX	*	750	9	150	9	* AG	728	5.3	.0	13.5
T. Eucalyp WBDX	*	-150	9	-750	9	* AG	1622	5.3	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: ExistwP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	14	-19	1.8
2. NW	*	-17	15	1.8
3. SW	*	-15	-21	1.8
4. NE	*	14	17	1.8
5. ES mdblk	*	150	-19	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-21	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	14	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	14	150	1.8
13. ES blk	*	600	-19	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-21	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	14	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	14	600	1.8

JOB: Riverside Walmart Supercenter
RUN: ExistwP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	2.1	.2	.0	.0	.0	.0	.0	.8	.1
2. NW	99.	2.4	.0	.2	.0	.8	.0	.0	.0	.1
3. SW	6.	2.8	.0	.1	.0	1.3	.0	.0	.4	.0
4. NE	260.	2.8	.0	.3	.0	.5	.0	.0	.2	.0
5. ES mdblk	277.	1.7	.0	.0	.0	.0	.0	.0	.1	.7
6. WN mdblk	99.	2.4	.0	.0	.0	.0	.0	.0	.2	.1
7. WS mdblk	77.	2.1	.0	.0	.0	.2	.0	.0	.8	.0
8. EN mdblk	264.	1.8	.0	.0	.0	.0	.0	.0	.2	.0
9. SE mdblk	353.	1.4	.4	.0	.1	.3	.0	.0	.0	.0
10. NW mdblk	171.	2.3	.0	.1	.0	1.7	.0	.0	.0	.0
11. SW mdblk	3.	1.2	.0	.0	.0	.3	.2	.0	.0	.0
12. NE mdblk	194.	1.7	.0	.7	.0	.7	.0	.0	.0	.0
13. ES blk	276.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.9	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	82.	1.7	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.8	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.7	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	1.3	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: ExistwP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.3	.0	.2	.0	.0	.0	.0	.0	.1	.0	.0	.3
2. NW	*	.0	.6	.4	.0	.0	.0	.0	.0	.0	.2	.0	.0
3. SW	*	.2	.0	.3	.0	.0	.2	.2	.0	.0	.0	.0	.0
4. NE	*	.3	.1	1.1	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	*	.1	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	*	.3	.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.5	.1	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.2	.7	.2	.0	.0	.0	.0	.0	.1	.0	.0	.1
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.2	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	1.3
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.0	.0	.4
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.6	.0
17. SE blk	*	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.9	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.6	.4	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: ExistwP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Old 215 NBA	*	9	-150	9	0	* AG	155	8.5	.0	13.5
B. Old 215 NBD	*	9	0	9	150	* AG	579	5.8	.0	10.0
C. Old 215 NBL	*	5	-150	0	0	* AG	73	10.9	.0	10.0
D. Old 215 SBA	*	-9	150	-9	0	* AG	266	8.5	.0	13.5
E. Old 215 SBD	*	-9	0	-9	-150	* AG	87	5.7	.0	10.0
F. Old 215 SBL	*	-5	150	0	0	* AG	36	10.9	.0	10.0
G. Alessand EBA	*	-150	-9	0	-9	* AG	1581	11.5	.0	13.5
H. Alessand EBD	*	0	-9	150	-9	* AG	1611	9.1	.0	10.0
I. Alessand EBL	*	-150	-5	0	0	* AG	356	12.0	.0	10.0
J. Alessand WBA	*	150	9	0	9	* AG	1223	10.8	.0	13.5
K. Alessand WBD	*	0	9	-150	9	* AG	1424	7.7	.0	10.0
L. Alessand WBL	*	150	5	0	0	* AG	11	10.9	.0	10.0
M. Old 215 NBAX	*	9	-750	9	-150	* AG	228	5.3	.0	13.5
N. Old 215 NBDX	*	9	150	9	750	* AG	579	5.3	.0	10.0
O. Old 215 SBAX	*	-9	750	-9	150	* AG	302	5.3	.0	13.5
P. Old 215 SBDX	*	-9	-150	-9	-750	* AG	87	5.3	.0	10.0
Q. Alessan EBAX	*	-750	-9	-150	-9	* AG	1937	5.3	.0	13.5
R. Alessan EBDX	*	150	-9	750	-9	* AG	1611	5.3	.0	10.0
S. Alessan WBAX	*	750	9	150	9	* AG	1234	5.3	.0	13.5
T. Alessan WBDX	*	-150	9	-750	9	* AG	1424	5.3	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: ExistwP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	17	-15	1.8
2. NW	*	-17	15	1.8
3. SW	*	-15	-17	1.8
4. NE	*	15	17	1.8
5. ES mdblk	*	150	-15	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	15	150	1.8
13. ES blk	*	600	-15	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	15	600	1.8

JOB: Riverside Walmart Supercenter
RUN: ExistwP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	3.6	.0	.0	.0	.0	.0	.0	1.9	.5
2. NW	98.	2.9	.0	.1	.0	.1	.0	.0	.0	.4
3. SW	280.	3.3	.0	.0	.0	.0	.0	.0	2.4	.0
4. NE	257.	3.1	.0	.2	.0	.0	.0	.0	.8	.0
5. ES mdblk	278.	3.2	.0	.0	.0	.0	.0	.0	.2	2.0
6. WN mdblk	99.	3.0	.0	.0	.0	.0	.0	.0	.5	.3
7. WS mdblk	81.	3.7	.0	.0	.0	.0	.0	.0	2.4	.1
8. EN mdblk	262.	3.1	.0	.0	.0	.0	.0	.0	.4	.3
9. SE mdblk	353.	1.0	.2	.0	.0	.0	.0	.0	.1	.0
10. NW mdblk	172.	1.0	.0	.0	.0	.3	.0	.0	.0	.1
11. SW mdblk	5.	.9	.0	.0	.0	.0	.0	.0	.2	.0
12. NE mdblk	189.	1.2	.0	.5	.0	.0	.0	.0	.2	.0
13. ES blk	277.	2.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	2.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	2.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	1.7	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.6	.0	.0	.0	.0	.0	.0	.1	.0
18. NW blk	174.	.8	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	1.0	.0	.0	.0	.0	.0	.0	.1	.0

JOB: Riverside Walmart Supercenter
RUN: ExistwP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.3	.0	.3	.0	.0	.0	.0	.0	.2	.0	.0	.3
2. NW	*	.0	1.4	.4	.0	.0	.0	.0	.0	.0	.3	.1	.0
3. SW	*	.3	.0	.3	.0	.0	.0	.0	.0	.2	.0	.0	.3
4. NE	*	.3	.5	1.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	*	.1	.4	.3	.0	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	*	.2	.1	1.5	.0	.0	.0	.0	.0	.0	.1	.0	.0
7. WS mdblk	*	.4	.3	.3	.0	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	*	.1	1.7	.1	.0	.0	.0	.0	.0	.2	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.4	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	1.2
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.0	.0	.4
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	1.0	.0
17. SE blk	*	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.3	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.5	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: ExistwP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	12	-150	12	0	* AG	721	7.9	.0	13.5
B. Day Stre NBD	*	12	0	12	150	* AG	1228	5.6	.0	11.8
C. Day Stre NBL	*	9	-150	0	0	* AG	279	10.9	.0	10.0
D. Day Stre SBA	*	-14	150	-14	0	* AG	904	8.1	.0	17.0
E. Day Stre SBD	*	-14	0	-14	-150	* AG	954	5.6	.0	13.5
F. Day Stre SBL	*	-9	150	0	0	* AG	268	10.9	.0	10.0
G. Campus P EBA	*	-150	-9	0	-9	* AG	309	11.2	.0	10.0
H. Campus P EBD	*	0	-9	150	-9	* AG	442	9.3	.0	10.0
I. Campus P EBL	*	-150	-9	0	0	* AG	392	10.9	.0	10.0
J. Campus P WBA	*	150	9	0	9	* AG	362	10.0	.0	13.5
K. Campus P WBD	*	0	9	-150	9	* AG	683	7.0	.0	10.0
L. Campus P WBL	*	150	5	0	0	* AG	72	10.9	.0	10.0
M. Day Str NBAX	*	12	-750	12	-150	* AG	1000	5.3	.0	13.5
N. Day Str NBDX	*	12	150	12	750	* AG	1228	5.3	.0	11.8
O. Day Str SBAX	*	-14	750	-14	150	* AG	1172	5.3	.0	17.0
P. Day Str SBDX	*	-14	-150	-14	-750	* AG	954	5.3	.0	13.5
Q. Campus EBAX	*	-750	-9	-150	-9	* AG	701	5.3	.0	10.0
R. Campus EBDX	*	150	-9	750	-9	* AG	442	5.3	.0	10.0
S. Campus WBAX	*	750	9	150	9	* AG	434	5.3	.0	13.5
T. Campus WBDX	*	-150	9	-750	9	* AG	683	5.3	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: ExistwP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	21	-15	1.8
2. NW	*	-24	15	1.8
3. SW	*	-22	-15	1.8
4. NE	*	20	17	1.8
5. ES mdblk	*	150	-15	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-15	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	21	-150	1.8
10. NW mdblk	*	-24	150	1.8
11. SW mdblk	*	-22	-150	1.8
12. NE mdblk	*	20	150	1.8
13. ES blk	*	600	-15	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-15	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	21	-600	1.8
18. NW blk	*	-24	600	1.8
19. SW blk	*	-22	-600	1.8
20. NE blk	*	20	600	1.8

JOB: Riverside Walmart Supercenter
RUN: ExistwP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	350.	2.0	.2	.7	.0	.1	.0	.1	.0	.3
2. NW	169.	1.8	.1	.0	.1	.2	.5	.0	.1	.0
3. SW	8.	2.2	.0	.0	.0	.8	.1	.2	.2	.0
4. NE	259.	2.0	.0	.5	.0	.2	.0	.1	.2	.0
5. ES mdblk	277.	1.5	.0	.0	.0	.0	.0	.0	.0	.6
6. WN mdblk	98.	1.6	.0	.0	.0	.0	.0	.0	.1	.1
7. WS mdblk	80.	1.9	.0	.0	.0	.0	.0	.0	.6	.0
8. EN mdblk	263.	1.4	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	351.	1.8	.8	.0	.2	.2	.0	.0	.0	.0
10. NW mdblk	171.	1.8	.2	.0	.0	.9	.0	.2	.0	.0
11. SW mdblk	8.	1.6	.0	.2	.0	.1	.7	.0	.0	.0
12. NE mdblk	188.	1.8	.0	1.0	.0	.0	.1	.1	.0	.0
13. ES blk	276.	.9	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.8	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	1.6	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: ExistwP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.1	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
2. NW	*	.2	.0	.3	.0	.2	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.2	.0	.2	.0	.0	.3	.1	.0	.0	.0	.0	.0
4. NE	*	.3	.2	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.1	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.2	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.7	.1	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.1	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.2	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.6
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.2
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.4	.0
17. SE blk	*	.0	.0	.0	.0	.8	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.9	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.8	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	1.0	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: ExistwP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	9	-150	9	0	* AG	519	8.7	.0	13.5
B. Day Stre NBD	*	9	0	9	150	* AG	866	5.9	.0	10.0
C. Day Stre NBL	*	5	-150	0	0	* AG	54	10.9	.0	10.0
D. Day Stre SBA	*	-9	150	-9	0	* AG	882	9.3	.0	13.5
E. Day Stre SBD	*	-9	0	-9	-150	* AG	619	5.8	.0	10.0
F. Day Stre SBL	*	-5	150	0	0	* AG	191	10.9	.0	10.0
G. Eucalypt EBA	*	-150	-9	0	-9	* AG	594	8.7	.0	13.5
H. Eucalypt EBD	*	0	-9	150	-9	* AG	736	5.8	.0	10.0
I. Eucalypt EBL	*	-150	-5	0	0	* AG	253	11.8	.0	10.0
J. Eucalypt WBA	*	150	9	0	9	* AG	522	8.7	.0	13.5
K. Eucalypt WBD	*	0	9	-150	9	* AG	816	5.9	.0	10.0
L. Eucalypt WBL	*	150	5	0	0	* AG	22	10.9	.0	10.0
M. Day Str NBAX	*	9	-750	9	-150	* AG	573	5.3	.0	13.5
N. Day Str NBDX	*	9	150	9	750	* AG	866	5.3	.0	10.0
O. Day Str SBAX	*	-9	750	-9	150	* AG	1073	5.3	.0	13.5
P. Day Str SBDX	*	-9	-150	-9	-750	* AG	619	5.3	.0	10.0
Q. Eucalyp EBAX	*	-750	-9	-150	-9	* AG	847	5.3	.0	13.5
R. Eucalyp EBDX	*	150	-9	750	-9	* AG	736	5.3	.0	10.0
S. Eucalyp WBAX	*	750	9	150	9	* AG	544	5.3	.0	13.5
T. Eucalyp WBDX	*	-150	9	-750	9	* AG	816	5.3	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: ExistwP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	17	-15	1.8
2. NW	*	-17	15	1.8
3. SW	*	-15	-17	1.8
4. NE	*	15	17	1.8
5. ES mdblk	*	150	-15	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	15	150	1.8
13. ES blk	*	600	-15	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	15	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: ExistwP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	350.	1.9	.1	.5	.0	.3	.0	.1	.0	.3
2. NW	97.	1.9	.0	.2	.0	.5	.0	.0	.0	.1
3. SW	7.	2.3	.0	.1	.0	.9	.1	.2	.3	.0
4. NE	260.	2.0	.0	.3	.0	.3	.0	.0	.2	.0
5. ES mdblk	277.	1.4	.0	.0	.0	.0	.0	.0	.0	.6
6. WN mdblk	98.	1.5	.0	.0	.0	.0	.0	.0	.2	.1
7. WS mdblk	80.	1.6	.0	.0	.0	.0	.0	.0	.7	.0
8. EN mdblk	263.	1.4	.0	.0	.0	.0	.0	.0	.2	.0
9. SE mdblk	353.	1.5	.6	.0	.0	.2	.0	.0	.0	.0
10. NW mdblk	171.	1.9	.1	.1	.0	1.1	.0	.2	.0	.0
11. SW mdblk	6.	1.4	.0	.1	.0	.2	.5	.0	.0	.0
12. NE mdblk	190.	1.6	.0	.8	.0	.3	.0	.1	.0	.0
13. ES blk	276.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	1.4	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: ExistwP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.2	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
2. NW	*	.0	.6	.2	.0	.0	.0	.0	.0	.0	.2	.0	.0
3. SW	*	.1	.0	.2	.0	.0	.2	.1	.0	.0	.0	.0	.0
4. NE	*	.2	.1	.5	.0	.0	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	*	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.2	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.3	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.6	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.2	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.7
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.2
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.5	.0
17. SE blk	*	.0	.0	.0	.0	.5	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.9	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.6	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.8	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: ExistwP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	2	-150	2	0	* AG	344	8.9	.0	10.0
B. Day Stre NBD	*	2	0	2	150	* AG	507	6.1	.0	10.0
C. Day Stre NBL	*	2	-150	0	0	* AG	13	10.9	.0	10.0
D. Day Stre SBA	*	-2	150	-2	0	* AG	326	8.9	.0	10.0
E. Day Stre SBD	*	-2	0	-2	-150	* AG	343	5.8	.0	10.0
F. Day Stre SBL	*	-2	150	0	0	* AG	190	10.9	.0	10.0
G. Cottonwo EBA	*	-150	-5	0	-5	* AG	131	8.5	.0	10.0
H. Cottonwo EBD	*	0	-5	150	-5	* AG	324	5.8	.0	10.0
I. Cottonwo EBL	*	-150	-5	0	0	* AG	32	10.9	.0	10.0
J. Cottonwo WBA	*	150	7	0	7	* AG	238	8.7	.0	10.0
K. Cottonwo WBD	*	0	7	-150	7	* AG	123	5.7	.0	10.0
L. Cottonwo WBL	*	150	5	0	0	* AG	23	10.9	.0	10.0
M. Day Str NBAX	*	2	-750	2	-150	* AG	357	5.3	.0	10.0
N. Day Str NBDX	*	2	150	2	750	* AG	507	5.3	.0	10.0
O. Day Str SBAX	*	-2	750	-2	150	* AG	516	5.3	.0	10.0
P. Day Str SBDX	*	-2	-150	-2	-750	* AG	343	5.3	.0	10.0
Q. Cottonw EBAX	*	-750	-5	-150	-5	* AG	163	5.3	.0	10.0
R. Cottonw EBDX	*	150	-5	750	-5	* AG	324	5.3	.0	10.0
S. Cottonw WBAX	*	750	7	150	7	* AG	261	5.3	.0	10.0
T. Cottonw WBDX	*	-150	7	-750	7	* AG	123	5.3	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: ExistwP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-12	1.8
2. NW	*	-8	14	1.8
3. SW	*	-8	-12	1.8
4. NE	*	8	14	1.8
5. ES mdblk	*	150	-12	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-12	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-12	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-12	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Riverside Walmart Supercenter
RUN: ExistwP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	353.	1.4	.0	.4	.0	.3	.0	.3	.0	.1
2. NW	7.	1.2	.0	.3	.0	.5	.0	.3	.0	.0
3. SW	7.	1.3	.0	.3	.0	.4	.0	.3	.0	.0
4. NE	352.	1.2	.0	.5	.0	.3	.0	.3	.0	.0
5. ES mdblk	279.	.7	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	95.	.5	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	84.	.6	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	263.	.7	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	355.	1.1	.4	.0	.0	.0	.2	.0	.0	.0
10. NW mdblk	172.	1.4	.0	.3	.0	.5	.0	.4	.0	.0
11. SW mdblk	6.	1.0	.3	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	187.	1.2	.0	.5	.0	.3	.0	.2	.0	.0
13. ES blk	276.	.6	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.7	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.7	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.9	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: ExistwP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.0
17. SE blk	*	.0	.0	.0	.0	.3	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.3	.5	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.3	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.5	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: ExistwP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	5	-150	5	0	*	AG	42	10.0	.0	10.0
B. Day Stre NBD	*	5	0	5	150	*	AG	526	10.9	.0	10.0
C. Day Stre NBL	*	5	-150	0	0	*	AG	45	10.9	.0	10.0
D. Day Stre SBA	*	-5	150	-5	0	*	AG	189	10.0	.0	10.0
E. Day Stre SBD	*	-5	0	-5	-150	*	AG	15	6.1	.0	10.0
F. Day Stre SBL	*	-5	150	0	0	*	AG	185	10.9	.0	10.0
G. Alessand EBA	*	-150	-9	0	-9	*	AG	1492	8.4	.0	13.5
H. Alessand EBD	*	0	-9	150	-9	*	AG	1700	5.7	.0	11.8
I. Alessand EBL	*	-150	-5	0	0	*	AG	350	12.0	.0	10.0
J. Alessand WBA	*	150	7	0	7	*	AG	1183	8.7	.0	10.0
K. Alessand WBD	*	0	7	-150	7	*	AG	1251	5.9	.0	10.0
L. Alessand WBL	*	150	5	0	0	*	AG	6	10.9	.0	10.0
M. Day Str NBAX	*	5	-750	5	-150	*	AG	87	5.3	.0	10.0
N. Day Str NBDX	*	5	150	5	750	*	AG	526	5.3	.0	10.0
O. Day Str SBAX	*	-5	750	-5	150	*	AG	374	5.3	.0	10.0
P. Day Str SBDX	*	-5	-150	-5	-750	*	AG	15	5.3	.0	10.0
Q. Alessan EBAX	*	-750	-9	-150	-9	*	AG	1842	5.3	.0	13.5
R. Alessan EBDX	*	150	-9	750	-9	*	AG	1700	5.3	.0	11.8
S. Alessan WBAX	*	750	7	150	7	*	AG	1189	5.3	.0	10.0
T. Alessan WBDX	*	-150	7	-750	7	*	AG	1251	5.3	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: ExistwP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	12	-16	1.8
2. NW	*	-12	14	1.8
3. SW	*	-12	-17	1.8
4. NE	*	12	14	1.8
5. ES mdblk	*	150	-16	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	12	-150	1.8
10. NW mdblk	*	-12	150	1.8
11. SW mdblk	*	-12	-150	1.8
12. NE mdblk	*	12	150	1.8
13. ES blk	*	600	-16	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	12	-600	1.8
18. NW blk	*	-12	600	1.8
19. SW blk	*	-12	-600	1.8
20. NE blk	*	12	600	1.8

JOB: Riverside Walmart Supercenter
RUN: ExistwP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	2.7	.0	.0	.0	.0	.0	.0	1.5	.2
2. NW	98.	2.6	.0	.2	.0	.1	.0	.1	.0	.3
3. SW	279.	2.5	.0	.0	.0	.0	.0	.0	1.6	.0
4. NE	260.	2.9	.0	.4	.0	.0	.0	.1	.5	.0
5. ES mdblk	277.	2.3	.0	.0	.0	.0	.0	.0	.2	1.3
6. WN mdblk	98.	2.3	.0	.0	.0	.0	.0	.0	.4	.2
7. WS mdblk	81.	2.8	.0	.0	.0	.0	.0	.0	1.6	.0
8. EN mdblk	263.	2.5	.0	.0	.0	.0	.0	.0	.3	.2
9. SE mdblk	356.	.9	.0	.1	.0	.0	.0	.0	.0	.0
10. NW mdblk	169.	1.4	.0	.4	.0	.3	.0	.3	.0	.1
11. SW mdblk	3.	.8	.0	.2	.0	.0	.0	.0	.1	.0
12. NE mdblk	191.	1.6	.0	.9	.0	.1	.0	.2	.2	.0
13. ES blk	277.	2.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.9	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	2.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	1.8	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	357.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.8	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	2.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.9	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: ExistwP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.3	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	.2
2. NW	.0	1.3	.2	.0	.0	.0	.0	.0	.0	.3	.1	.0
3. SW	.3	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	.3
4. NE	.3	.3	.9	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	.1	.2	.2	.0	.0	.0	.0	.0	.1	.0	.0	.1
6. WN mdblk	.2	.1	1.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
7. WS mdblk	.4	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.1	1.4	.1	.0	.0	.0	.0	.0	.2	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.4	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	1.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.0	.0	.4
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	1.0	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.2	.4	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.5	.2	.0	.0	.0	.0	.0

SUPERCENTER AT CANYON CROSSINGS

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

OPENING YEAR (2007) WITHOUT PROJECT SCENARIO

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valley S NBA	*	7	-150	7	0	* AG	146	7.9	.0	10.0
B. Valley S NBD	*	7	0	7	150	* AG	0	4.9	.0	10.0
C. Valley S NBL	*	5	-150	0	0	* AG	204	10.9	.0	10.0
D. Valley S SBA	*	-7	150	-7	0	* AG	78	7.9	.0	10.0
E. Valley S SBD	*	-7	0	-7	-150	* AG	360	5.3	.0	10.0
F. Valley S SBL	*	-5	150	0	0	* AG	43	10.1	.0	10.0
G. Corporat EBA	*	-150	-2	0	-2	* AG	213	7.9	.0	10.0
H. Corporat EBD	*	0	-2	150	-2	* AG	259	5.3	.0	10.0
I. Corporat EBL	*	-150	-2	0	0	* AG	0	4.9	.0	10.0
J. Corporat WBA	*	150	7	0	7	* AG	103	7.9	.0	10.0
K. Corporat WBD	*	0	7	-150	7	* AG	307	5.3	.0	10.0
L. Corporat WBL	*	150	5	0	0	* AG	139	10.1	.0	10.0
M. Valley NBAX	*	7	-750	7	-150	* AG	349	4.9	.0	10.0
N. Valley NBDX	*	7	150	7	750	* AG	0	4.9	.0	10.0
O. Valley SBAX	*	-7	750	-7	150	* AG	121	4.9	.0	10.0
P. Valley SBDX	*	-7	-150	-7	-750	* AG	360	4.9	.0	10.0
Q. Corpora EBAX	*	-750	-2	-150	-2	* AG	213	4.9	.0	10.0
R. Corpora EBDX	*	150	-2	750	-2	* AG	259	4.9	.0	10.0
S. Corpora WBAX	*	750	7	150	7	* AG	242	4.9	.0	10.0
T. Corpora WBDX	*	-150	7	-750	7	* AG	307	4.9	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: 2007nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	14	-8	1.8
2. NW	*	-14	14	1.8
3. SW	*	-14	-8	1.8
4. NE	*	14	14	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	14	-150	1.8
10. NW mdblk	*	-14	150	1.8
11. SW mdblk	*	-14	-150	1.8
12. NE mdblk	*	14	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	14	-600	1.8
18. NW blk	*	-14	600	1.8
19. SW blk	*	-14	-600	1.8
20. NE blk	*	14	600	1.8

JOB: Riverside Walmart Supercenter
RUN: 2007nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.8	.0	.0	.1	.0	.0	.0	.2	.0
2. NW	172.	.8	.0	.0	.2	.0	.3	.0	.0	.0
3. SW	82.	.9	.0	.0	.1	.0	.1	.0	.0	.2
4. NE	187.	.8	.2	.0	.2	.0	.0	.0	.0	.0
5. ES mdblk	276.	.6	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	97.	.6	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	85.	.6	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	262.	.6	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	349.	.7	.2	.0	.3	.0	.1	.0	.0	.0
10. NW mdblk	175.	.5	.0	.0	.0	.1	.0	.0	.0	.0
11. SW mdblk	11.	.6	.0	.0	.2	.0	.3	.0	.0	.0
12. NE mdblk	184.	.4	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.5	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.5	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	177.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.6	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	183.	.2	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: 2007nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0
17. SE blk	*	.0	.0	.0	.0	.3	.0	.0	.1	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.3	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valley S NBA	*	7	-150	7	0	* AG	196	9.2	.0	10.0
B. Valley S NBD	*	7	0	7	150	* AG	379	5.7	.0	10.0
C. Valley S NBL	*	5	-150	0	0	* AG	91	10.1	.0	10.0
D. Valley S SBA	*	-9	150	-9	0	* AG	769	11.0	.0	13.5
E. Valley S SBD	*	-9	0	-9	-150	* AG	188	5.7	.0	10.0
F. Valley S SBL	*	-5	150	0	0	* AG	45	10.1	.0	10.0
G. Eucalypt EBA	*	-150	-12	0	-12	* AG	794	7.5	.0	13.5
H. Eucalypt EBD	*	0	-12	150	-12	* AG	864	5.2	.0	10.0
I. Eucalypt EBL	*	-150	-9	0	0	* AG	233	10.1	.0	10.0
J. Eucalypt WBA	*	150	9	0	9	* AG	717	7.5	.0	13.5
K. Eucalypt WBD	*	0	9	-150	9	* AG	1452	5.8	.0	10.0
L. Eucalypt WBL	*	150	5	0	0	* AG	41	10.1	.0	10.0
M. Valley NBAX	*	7	-750	7	-150	* AG	286	4.9	.0	10.0
N. Valley NBDX	*	7	150	7	750	* AG	379	4.9	.0	10.0
O. Valley SBAX	*	-9	750	-9	150	* AG	813	4.9	.0	13.5
P. Valley SBDX	*	-9	-150	-9	-750	* AG	188	4.9	.0	10.0
Q. Eucalyp EBAX	*	-750	-12	-150	-12	* AG	1027	4.9	.0	13.5
R. Eucalyp EBDX	*	150	-12	750	-12	* AG	864	4.9	.0	10.0
S. Eucalyp WBAX	*	750	9	150	9	* AG	757	4.9	.0	13.5
T. Eucalyp WBDX	*	-150	9	-750	9	* AG	1452	4.9	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: 2007nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	14	-19	1.8
2. NW	*	-17	15	1.8
3. SW	*	-15	-21	1.8
4. NE	*	14	17	1.8
5. ES mdblk	*	150	-19	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-21	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	14	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	14	150	1.8
13. ES blk	*	600	-19	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-21	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	14	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.8	.1	.0	.0	.0	.0	.0	.7	.1
2. NW	98.	2.0	.0	.0	.0	.5	.0	.0	.0	.1
3. SW	6.	2.0	.0	.0	.0	.9	.0	.0	.4	.0
4. NE	260.	2.1	.0	.1	.0	.3	.0	.0	.2	.0
5. ES mdblk	278.	1.5	.0	.0	.0	.0	.0	.0	.0	.7
6. WN mdblk	98.	1.9	.0	.0	.0	.0	.0	.0	.1	.1
7. WS mdblk	79.	1.6	.0	.0	.0	.0	.0	.0	.8	.0
8. EN mdblk	264.	1.5	.0	.0	.0	.0	.0	.0	.2	.0
9. SE mdblk	353.	1.1	.3	.0	.1	.2	.0	.0	.0	.0
10. NW mdblk	171.	1.7	.0	.0	.0	1.2	.0	.0	.0	.0
11. SW mdblk	5.	.9	.0	.0	.0	.2	.2	.0	.0	.0
12. NE mdblk	194.	1.1	.0	.3	.0	.5	.0	.0	.0	.0
13. ES blk	277.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	82.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.6	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.9	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: 2007nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.2	.0	.2	.0	.0	.0	.0	.0	.1	.0	.0	.3
2. NW	*	.0	.6	.3	.0	.0	.0	.0	.0	.0	.2	.0	.0
3. SW	*	.0	.0	.2	.0	.0	.0	.1	.0	.0	.0	.0	.0
4. NE	*	.1	.1	.9	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	*	.0	.1	.2	.0	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	*	.1	.0	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.2	.1	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.7	.2	.0	.0	.0	.0	.0	.1	.0	.0	.1
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.2	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	1.1
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.8	.0	.0	.3
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.6	.0
17. SE blk	*	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.1	.6	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.3	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Old 215 NBA	*	9	-150	9	0	* AG	161	7.9	.0	13.5
B. Old 215 NBD	*	9	0	9	150	* AG	544	5.3	.0	10.0
C. Old 215 NBL	*	5	-150	0	0	* AG	76	10.1	.0	10.0
D. Old 215 SBA	*	-9	150	-9	0	* AG	217	7.9	.0	13.5
E. Old 215 SBD	*	-9	0	-9	-150	* AG	91	5.3	.0	10.0
F. Old 215 SBL	*	-5	150	0	0	* AG	37	10.1	.0	10.0
G. Alessand EBA	*	-150	-9	0	-9	* AG	1615	10.9	.0	13.5
H. Alessand EBD	*	0	-9	150	-9	* AG	1646	8.4	.0	10.0
I. Alessand EBL	*	-150	-5	0	0	* AG	312	11.0	.0	10.0
J. Alessand WBA	*	150	9	0	9	* AG	1243	10.0	.0	13.5
K. Alessand WBD	*	0	9	-150	9	* AG	1393	6.1	.0	10.0
L. Alessand WBL	*	150	5	0	0	* AG	11	10.1	.0	10.0
M. Old 215 NBAX	*	9	-750	9	-150	* AG	237	4.9	.0	13.5
N. Old 215 NBDX	*	9	150	9	750	* AG	544	4.9	.0	10.0
O. Old 215 SBAX	*	-9	750	-9	150	* AG	255	4.9	.0	13.5
P. Old 215 SBDX	*	-9	-150	-9	-750	* AG	91	4.9	.0	10.0
Q. Alessan EBAX	*	-750	-9	-150	-9	* AG	1927	4.9	.0	13.5
R. Alessan EBDX	*	150	-9	750	-9	* AG	1646	4.9	.0	10.0
S. Alessan WBAX	*	750	9	150	9	* AG	1254	4.9	.0	13.5
T. Alessan WBDX	*	-150	9	-750	9	* AG	1393	4.9	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: 2007nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	17	-15	1.8
2. NW	*	-17	15	1.8
3. SW	*	-15	-17	1.8
4. NE	*	15	17	1.8
5. ES mdblk	*	150	-15	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	15	150	1.8
13. ES blk	*	600	-15	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	15	600	1.8

JOB: Riverside Walmart Supercenter
RUN: 2007nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	3.4	.0	.0	.0	.0	.0	.0	1.8	.5
2. NW	98.	2.6	.0	.1	.0	.1	.0	.0	.0	.4
3. SW	280.	3.1	.0	.0	.0	.0	.0	.0	2.3	.0
4. NE	257.	2.7	.0	.2	.0	.0	.0	.0	.7	.0
5. ES mdblk	278.	3.0	.0	.0	.0	.0	.0	.0	.2	1.9
6. WN mdblk	99.	2.6	.0	.0	.0	.0	.0	.0	.5	.3
7. WS mdblk	81.	3.5	.0	.0	.0	.0	.0	.0	2.3	.1
8. EN mdblk	262.	2.8	.0	.0	.0	.0	.0	.0	.4	.3
9. SE mdblk	353.	.9	.2	.0	.0	.0	.0	.0	.1	.0
10. NW mdblk	172.	.9	.0	.0	.0	.3	.0	.0	.0	.1
11. SW mdblk	6.	.8	.0	.0	.0	.0	.0	.0	.1	.0
12. NE mdblk	189.	1.1	.0	.4	.0	.0	.0	.0	.2	.0
13. ES blk	277.	1.9	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.9	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	2.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	1.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.6	.0	.0	.0	.0	.0	.0	.1	.0
18. NW blk	174.	.7	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.9	.0	.0	.0	.0	.0	.0	.1	.0

JOB: Riverside Walmart Supercenter
RUN: 2007nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.3	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	.2
2. NW	.0	1.3	.3	.0	.0	.0	.0	.0	.0	.3	.1	.0
3. SW	.2	.0	.2	.0	.0	.0	.0	.0	.1	.0	.0	.2
4. NE	.3	.5	.8	.0	.0	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	.0	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	.2	.1	1.2	.0	.0	.0	.0	.0	.0	.1	.0	.0
7. WS mdblk	.3	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	1.6	.1	.0	.0	.0	.0	.0	.2	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.4	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	1.1
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0	.0	.3
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.9	.0
17. SE blk	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	12	-150	12	0	* AG	750	7.3	.0	13.5
B. Day Stre NBD	*	12	0	12	150	* AG	1071	5.2	.0	11.8
C. Day Stre NBL	*	9	-150	0	0	* AG	204	10.1	.0	10.0
D. Day Stre SBA	*	-14	150	-14	0	* AG	738	7.3	.0	17.0
E. Day Stre SBD	*	-14	0	-14	-150	* AG	904	5.2	.0	13.5
F. Day Stre SBL	*	-9	150	0	0	* AG	279	10.1	.0	10.0
G. Campus P EBA	*	-150	-9	0	-9	* AG	233	9.6	.0	10.0
H. Campus P EBD	*	0	-9	150	-9	* AG	460	8.6	.0	10.0
I. Campus P EBL	*	-150	-9	0	0	* AG	202	10.1	.0	10.0
J. Campus P WBA	*	150	9	0	9	* AG	377	9.2	.0	13.5
K. Campus P WBD	*	0	9	-150	9	* AG	422	5.9	.0	10.0
L. Campus P WBL	*	150	5	0	0	* AG	75	10.1	.0	10.0
M. Day Str NBAX	*	12	-750	12	-150	* AG	954	4.9	.0	13.5
N. Day Str NBDX	*	12	150	12	750	* AG	1071	4.9	.0	11.8
O. Day Str SBAX	*	-14	750	-14	150	* AG	1017	4.9	.0	17.0
P. Day Str SBDX	*	-14	-150	-14	-750	* AG	904	4.9	.0	13.5
Q. Campus EBAX	*	-750	-9	-150	-9	* AG	435	4.9	.0	10.0
R. Campus EBDX	*	150	-9	750	-9	* AG	460	4.9	.0	10.0
S. Campus WBAX	*	750	9	150	9	* AG	451	4.9	.0	13.5
T. Campus WBDX	*	-150	9	-750	9	* AG	422	4.9	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: 2007nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

	RECEPTOR	*	COORDINATES (M) X	Y	Z
1.	SE	*	21	-15	1.8
2.	NW	*	-24	15	1.8
3.	SW	*	-22	-15	1.8
4.	NE	*	20	17	1.8
5.	ES mdblk	*	150	-15	1.8
6.	WN mdblk	*	-150	15	1.8
7.	WS mdblk	*	-150	-15	1.8
8.	EN mdblk	*	150	17	1.8
9.	SE mdblk	*	21	-150	1.8
10.	NW mdblk	*	-24	150	1.8
11.	SW mdblk	*	-22	-150	1.8
12.	NE mdblk	*	20	150	1.8
13.	ES blk	*	600	-15	1.8
14.	WN blk	*	-600	15	1.8
15.	WS blk	*	-600	-15	1.8
16.	EN blk	*	600	17	1.8
17.	SE blk	*	21	-600	1.8
18.	NW blk	*	-24	600	1.8
19.	SW blk	*	-22	-600	1.8
20.	NE blk	*	20	600	1.8

JOB: Riverside Walmart Supercenter
RUN: 2007nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	350.	1.7	.2	.6	.0	.1	.0	.1	.0	.3
2. NW	98.	1.5	.0	.2	.0	.3	.0	.1	.0	.1
3. SW	8.	1.6	.0	.0	.0	.6	.1	.2	.2	.0
4. NE	188.	1.7	.6	.2	.1	.0	.0	.0	.0	.1
5. ES mdblk	278.	1.2	.0	.0	.0	.0	.0	.0	.0	.6
6. WN mdblk	97.	1.1	.0	.0	.0	.0	.0	.0	.0	.1
7. WS mdblk	82.	1.3	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	262.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	1.6	.8	.0	.2	.1	.0	.0	.0	.0
10. NW mdblk	170.	1.4	.2	.0	.0	.7	.0	.2	.0	.0
11. SW mdblk	8.	1.4	.0	.1	.0	.0	.6	.0	.0	.0
12. NE mdblk	188.	1.5	.0	.8	.0	.0	.1	.1	.0	.0
13. ES blk	276.	.8	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.8	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.8	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.8	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	1.3	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: 2007nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.1	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
2. NW	*	.0	.4	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.1	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0
4. NE	*	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
5. ES mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.3	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.4
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.4	.0
17. SE blk	*	.0	.0	.0	.0	.7	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.7	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.7	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.8	.2	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	9	-150	9	0	* AG	482	8.0	.0	13.5
B. Day Stre NBD	*	9	0	9	150	* AG	813	5.5	.0	10.0
C. Day Stre NBL	*	5	-150	0	0	* AG	56	10.1	.0	10.0
D. Day Stre SBA	*	-9	150	-9	0	* AG	858	8.6	.0	13.5
E. Day Stre SBD	*	-9	0	-9	-150	* AG	585	5.3	.0	10.0
F. Day Stre SBL	*	-5	150	0	0	* AG	170	10.1	.0	10.0
G. Eucalypt EBA	*	-150	-9	0	-9	* AG	618	8.2	.0	13.5
H. Eucalypt EBD	*	0	-9	150	-9	* AG	736	5.4	.0	10.0
I. Eucalypt EBL	*	-150	-5	0	0	* AG	263	10.9	.0	10.0
J. Eucalypt WBA	*	150	9	0	9	* AG	514	8.0	.0	13.5
K. Eucalypt WBD	*	0	9	-150	9	* AG	849	5.5	.0	10.0
L. Eucalypt WBL	*	150	5	0	0	* AG	23	10.1	.0	10.0
M. Day Str NBAX	*	9	-750	9	-150	* AG	538	4.9	.0	13.5
N. Day Str NBDX	*	9	150	9	750	* AG	813	4.9	.0	10.0
O. Day Str SBAX	*	-9	750	-9	150	* AG	1028	4.9	.0	13.5
P. Day Str SBDX	*	-9	-150	-9	-750	* AG	585	4.9	.0	10.0
Q. Eucalyp EBAX	*	-750	-9	-150	-9	* AG	881	4.9	.0	13.5
R. Eucalyp EBDX	*	150	-9	750	-9	* AG	736	4.9	.0	10.0
S. Eucalyp WBAX	*	750	9	150	9	* AG	537	4.9	.0	13.5
T. Eucalyp WBDX	*	-150	9	-750	9	* AG	849	4.9	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: 2007nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

	RECEPTOR	*	COORDINATES (M) X	Y	Z
1.	SE	*	17	-15	1.8
2.	NW	*	-17	15	1.8
3.	SW	*	-15	-17	1.8
4.	NE	*	15	17	1.8
5.	ES mdblk	*	150	-15	1.8
6.	WN mdblk	*	-150	15	1.8
7.	WS mdblk	*	-150	-17	1.8
8.	EN mdblk	*	150	17	1.8
9.	SE mdblk	*	17	-150	1.8
10.	NW mdblk	*	-17	150	1.8
11.	SW mdblk	*	-15	-150	1.8
12.	NE mdblk	*	15	150	1.8
13.	ES blk	*	600	-15	1.8
14.	WN blk	*	-600	15	1.8
15.	WS blk	*	-600	-17	1.8
16.	EN blk	*	600	17	1.8
17.	SE blk	*	17	-600	1.8
18.	NW blk	*	-17	600	1.8
19.	SW blk	*	-15	-600	1.8
20.	NE blk	*	15	600	1.8

JOB: Riverside Walmart Supercenter
RUN: 2007nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.7	.2	.0	.0	.0	.1	.0	.6	.1
2. NW	98.	1.7	.0	.2	.0	.5	.0	.0	.0	.1
3. SW	7.	2.1	.0	.1	.0	.8	.1	.1	.3	.0
4. NE	260.	1.9	.0	.3	.0	.3	.0	.0	.2	.0
5. ES mdblk	277.	1.3	.0	.0	.0	.0	.0	.0	.0	.6
6. WN mdblk	98.	1.4	.0	.0	.0	.0	.0	.0	.2	.1
7. WS mdblk	80.	1.6	.0	.0	.0	.0	.0	.0	.7	.0
8. EN mdblk	263.	1.3	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	353.	1.3	.5	.0	.0	.2	.0	.0	.0	.0
10. NW mdblk	171.	1.7	.1	.1	.0	1.0	.0	.2	.0	.0
11. SW mdblk	6.	1.2	.0	.1	.0	.1	.4	.0	.0	.0
12. NE mdblk	190.	1.4	.0	.7	.0	.3	.0	.1	.0	.0
13. ES blk	276.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.9	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.9	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.9	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	1.2	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: 2007nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.2	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.2
2. NW	*	.0	.5	.2	.0	.0	.0	.0	.0	.0	.1	.0	.0
3. SW	*	.1	.0	.2	.0	.0	.2	.1	.0	.0	.0	.0	.0
4. NE	*	.2	.1	.5	.0	.0	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	*	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.2	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.3	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.2	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.7
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.2
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.4	.0
17. SE blk	*	.0	.0	.0	.0	.4	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.8	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.5	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.7	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	2	-150	2	0	* AG	329	8.2	.0	10.0
B. Day Stre NBD	*	2	0	2	150	* AG	469	5.5	.0	10.0
C. Day Stre NBL	*	2	-150	0	0	* AG	14	10.1	.0	10.0
D. Day Stre SBA	*	-2	150	-2	0	* AG	310	8.2	.0	10.0
E. Day Stre SBD	*	-2	0	-2	-150	* AG	328	5.4	.0	10.0
F. Day Stre SBL	*	-2	150	0	0	* AG	169	10.1	.0	10.0
G. Cottonwo EBA	*	-150	-5	0	-5	* AG	136	7.9	.0	10.0
H. Cottonwo EBD	*	0	-5	150	-5	* AG	308	5.4	.0	10.0
I. Cottonwo EBL	*	-150	-5	0	0	* AG	33	10.1	.0	10.0
J. Cottonwo WBA	*	150	7	0	7	* AG	218	8.0	.0	10.0
K. Cottonwo WBD	*	0	7	-150	7	* AG	128	5.3	.0	10.0
L. Cottonwo WBL	*	150	5	0	0	* AG	24	10.1	.0	10.0
M. Day Str NBAX	*	2	-750	2	-150	* AG	342	4.9	.0	10.0
N. Day Str NBDX	*	2	150	2	750	* AG	469	4.9	.0	10.0
O. Day Str SBAX	*	-2	750	-2	150	* AG	478	4.9	.0	10.0
P. Day Str SBDX	*	-2	-150	-2	-750	* AG	328	4.9	.0	10.0
Q. Cottonw EBAX	*	-750	-5	-150	-5	* AG	170	4.9	.0	10.0
R. Cottonw EBDX	*	150	-5	750	-5	* AG	308	4.9	.0	10.0
S. Cottonw WBAX	*	750	7	150	7	* AG	242	4.9	.0	10.0
T. Cottonw WBDX	*	-150	7	-750	7	* AG	128	4.9	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: 2007nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

	RECEPTOR	*	COORDINATES (M) X	Y	Z
1.	SE	*	8	-12	1.8
2.	NW	*	-8	14	1.8
3.	SW	*	-8	-12	1.8
4.	NE	*	8	14	1.8
5.	ES mdblk	*	150	-12	1.8
6.	WN mdblk	*	-150	14	1.8
7.	WS mdblk	*	-150	-12	1.8
8.	EN mdblk	*	150	14	1.8
9.	SE mdblk	*	8	-150	1.8
10.	NW mdblk	*	-8	150	1.8
11.	SW mdblk	*	-8	-150	1.8
12.	NE mdblk	*	8	150	1.8
13.	ES blk	*	600	-12	1.8
14.	WN blk	*	-600	14	1.8
15.	WS blk	*	-600	-12	1.8
16.	EN blk	*	600	14	1.8
17.	SE blk	*	8	-600	1.8
18.	NW blk	*	-8	600	1.8
19.	SW blk	*	-8	-600	1.8
20.	NE blk	*	8	600	1.8

JOB: Riverside Walmart Supercenter
RUN: 2007nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	353.	1.2	.0	.4	.0	.3	.0	.2	.0	.1
2. NW	7.	1.0	.0	.2	.0	.4	.0	.2	.0	.0
3. SW	7.	1.2	.0	.3	.0	.4	.0	.2	.0	.0
4. NE	352.	1.0	.0	.4	.0	.3	.0	.2	.0	.0
5. ES mdblk	278.	.6	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	95.	.5	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	84.	.6	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	263.	.6	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	355.	.9	.4	.0	.0	.0	.2	.0	.0	.0
10. NW mdblk	173.	1.2	.0	.2	.0	.4	.0	.3	.0	.0
11. SW mdblk	6.	.9	.3	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	187.	1.1	.0	.4	.0	.3	.0	.2	.0	.0
13. ES blk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.6	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.8	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.7	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.8	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: 2007nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0
17. SE blk	*	.0	.0	.0	.0	.3	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.3	.4	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.3	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.4	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	5	-150	5	0	* AG	44	9.2	.0	10.0
B. Day Stre NBD	*	5	0	5	150	* AG	518	10.1	.0	10.0
C. Day Stre NBL	*	5	-150	0	0	* AG	47	10.1	.0	10.0
D. Day Stre SBA	*	-5	150	-5	0	* AG	167	9.2	.0	10.0
E. Day Stre SBD	*	-5	0	-5	-150	* AG	16	5.7	.0	10.0
F. Day Stre SBL	*	-5	150	0	0	* AG	192	10.1	.0	10.0
G. Alessand EBA	*	-150	-9	0	-9	* AG	1552	8.0	.0	13.5
H. Alessand EBD	*	0	-9	150	-9	* AG	1768	5.3	.0	11.8
I. Alessand EBL	*	-150	-5	0	0	* AG	335	11.0	.0	10.0
J. Alessand WBA	*	150	7	0	7	* AG	1230	8.5	.0	10.0
K. Alessand WBD	*	0	7	-150	7	* AG	1272	5.5	.0	10.0
L. Alessand WBL	*	150	5	0	0	* AG	6	10.1	.0	10.0
M. Day Str NBAX	*	5	-750	5	-150	* AG	91	4.9	.0	10.0
N. Day Str NBDX	*	5	150	5	750	* AG	518	4.9	.0	10.0
O. Day Str SBAX	*	-5	750	-5	150	* AG	360	4.9	.0	10.0
P. Day Str SBDX	*	-5	-150	-5	-750	* AG	16	4.9	.0	10.0
Q. Alessan EBAX	*	-750	-9	-150	-9	* AG	1887	4.9	.0	13.5
R. Alessan EBDX	*	150	-9	750	-9	* AG	1768	4.9	.0	11.8
S. Alessan WBAX	*	750	7	150	7	* AG	1237	4.9	.0	10.0
T. Alessan WBDX	*	-150	7	-750	7	* AG	1272	4.9	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: 2007nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	12	-16	1.8
2. NW	-12	14	1.8
3. SW	-12	-17	1.8
4. NE	12	14	1.8
5. ES mdblk	150	-16	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-17	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	12	-150	1.8
10. NW mdblk	-12	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-16	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-17	1.8
16. EN blk	600	14	1.8
17. SE blk	12	-600	1.8
18. NW blk	-12	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	12	600	1.8

JOB: Riverside Walmart Supercenter
RUN: 2007nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	2.6	.0	.0	.0	.0	.0	.0	1.4	.2
2. NW	98.	2.6	.0	.2	.0	.1	.0	.1	.0	.3
3. SW	279.	2.4	.0	.0	.0	.0	.0	.0	1.6	.0
4. NE	259.	2.8	.0	.4	.0	.0	.0	.1	.6	.0
5. ES mdblk	278.	2.2	.0	.0	.0	.0	.0	.0	.2	1.2
6. WN mdblk	98.	2.2	.0	.0	.0	.0	.0	.0	.4	.2
7. WS mdblk	81.	2.7	.0	.0	.0	.0	.0	.0	1.6	.0
8. EN mdblk	263.	2.5	.0	.0	.0	.0	.0	.0	.3	.2
9. SE mdblk	356.	.8	.0	.1	.0	.0	.0	.0	.0	.0
10. NW mdblk	169.	1.2	.0	.3	.0	.3	.0	.3	.0	.1
11. SW mdblk	3.	.8	.0	.1	.0	.0	.0	.0	.1	.0
12. NE mdblk	191.	1.4	.0	.8	.0	.1	.0	.2	.2	.0
13. ES blk	277.	1.9	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.8	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	2.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	1.7	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	357.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.8	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	2.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.9	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: 2007nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.3	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	.2
2. NW	*	.0	1.3	.2	.0	.0	.0	.0	.0	.0	.3	.1	.0
3. SW	*	.3	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	.2
4. NE	*	.3	.3	.8	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	*	.0	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	*	.2	.1	1.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
7. WS mdblk	*	.3	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.1	1.4	.1	.0	.0	.0	.0	.0	.2	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.3	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	1.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0	.0	.3
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	1.0	.0
17. SE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.3	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.4	.2	.0	.0	.0	.0	.0

SUPERCENTER AT CANYON CROSSINGS

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

OPENING YEAR (2007) WITH PROJECT SCENARIO

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valley S NBA	*	7	-150	7	0	* AG	424	8.0	.0	10.0
B. Valley S NBD	*	7	0	7	150	* AG	298	5.3	.0	10.0
C. Valley S NBL	*	5	-150	0	0	* AG	204	10.9	.0	10.0
D. Valley S SBA	*	-7	150	-7	0	* AG	346	7.9	.0	10.0
E. Valley S SBD	*	-7	0	-7	-150	* AG	643	5.4	.0	10.0
F. Valley S SBL	*	-5	150	0	0	* AG	72	10.1	.0	10.0
G. Corporat EBA	*	-150	-2	0	-2	* AG	213	7.9	.0	10.0
H. Corporat EBD	*	0	-2	150	-2	* AG	297	5.3	.0	10.0
I. Corporat EBL	*	-150	-2	0	0	* AG	0	4.9	.0	10.0
J. Corporat WBA	*	150	7	0	7	* AG	132	7.9	.0	10.0
K. Corporat WBD	*	0	7	-150	7	* AG	307	5.3	.0	10.0
L. Corporat WBL	*	150	5	0	0	* AG	154	10.1	.0	10.0
M. Valley NBAX	*	7	-750	7	-150	* AG	627	4.9	.0	10.0
N. Valley NBDX	*	7	150	7	750	* AG	298	4.9	.0	10.0
O. Valley SBAX	*	-7	750	-7	150	* AG	418	4.9	.0	10.0
P. Valley SBDX	*	-7	-150	-7	-750	* AG	643	4.9	.0	10.0
Q. Corpora EBAX	*	-750	-2	-150	-2	* AG	213	4.9	.0	10.0
R. Corpora EBDX	*	150	-2	750	-2	* AG	297	4.9	.0	10.0
S. Corpora WBAX	*	750	7	150	7	* AG	286	4.9	.0	10.0
T. Corpora WBDX	*	-150	7	-750	7	* AG	307	4.9	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: 2007wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	14	-8	1.8
2. NW	*	-14	14	1.8
3. SW	*	-14	-8	1.8
4. NE	*	14	14	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	14	-150	1.8
10. NW mdblk	*	-14	150	1.8
11. SW mdblk	*	-14	-150	1.8
12. NE mdblk	*	14	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	14	-600	1.8
18. NW blk	*	-14	600	1.8
19. SW blk	*	-14	-600	1.8
20. NE blk	*	14	600	1.8

JOB: Riverside Walmart Supercenter
RUN: 2007wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	188.	1.1	.5	.0	.2	.0	.1	.0	.0	.0
2. NW	172.	1.2	.2	.0	.2	.0	.4	.0	.0	.0
3. SW	82.	1.1	.1	.0	.1	.0	.2	.0	.0	.2
4. NE	188.	1.3	.5	.0	.2	.0	.1	.0	.0	.0
5. ES mdblk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	97.	.7	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	85.	.7	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	262.	.8	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	351.	1.2	.5	.0	.3	.0	.1	.0	.0	.0
10. NW mdblk	174.	1.0	.1	.0	.0	.4	.0	.0	.0	.0
11. SW mdblk	8.	1.1	.1	.0	.1	.0	.5	.0	.0	.0
12. NE mdblk	186.	.8	.0	.2	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.6	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.5	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.9	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.7	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.9	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.6	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: 2007wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
2. NW	*	.0	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.2	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.0
17. SE blk	*	.0	.0	.0	.0	.5	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.1	.4	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.5	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.3	.2	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valley S NBA	*	7	-150	7	0	* AG	252	9.2	.0	10.0
B. Valley S NBD	*	7	0	7	150	* AG	657	6.5	.0	10.0
C. Valley S NBL	*	5	-150	0	0	* AG	91	10.1	.0	10.0
D. Valley S SBA	*	-9	150	-9	0	* AG	1052	11.0	.0	13.5
E. Valley S SBD	*	-9	0	-9	-150	* AG	245	5.9	.0	10.0
F. Valley S SBL	*	-5	150	0	0	* AG	45	10.1	.0	10.0
G. Eucalypt EBA	*	-150	-12	0	-12	* AG	794	7.5	.0	13.5
H. Eucalypt EBD	*	0	-12	150	-12	* AG	864	5.2	.0	10.0
I. Eucalypt EBL	*	-150	-9	0	0	* AG	455	10.9	.0	10.0
J. Eucalypt WBA	*	150	9	0	9	* AG	717	7.5	.0	13.5
K. Eucalypt WBD	*	0	9	-150	9	* AG	1678	6.3	.0	10.0
L. Eucalypt WBL	*	150	5	0	0	* AG	41	10.1	.0	10.0
M. Valley NBAX	*	7	-750	7	-150	* AG	342	4.9	.0	10.0
N. Valley NBDX	*	7	150	7	750	* AG	657	4.9	.0	10.0
O. Valley SBAX	*	-9	750	-9	150	* AG	1096	4.9	.0	13.5
P. Valley SBDX	*	-9	-150	-9	-750	* AG	245	4.9	.0	10.0
Q. Eucalyp EBAX	*	-750	-12	-150	-12	* AG	1249	4.9	.0	13.5
R. Eucalyp EBDX	*	150	-12	750	-12	* AG	864	4.9	.0	10.0
S. Eucalyp WBAX	*	750	9	150	9	* AG	757	4.9	.0	13.5
T. Eucalyp WBDX	*	-150	9	-750	9	* AG	1678	4.9	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: 2007wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	14	-19	1.8
2. NW	*	-17	15	1.8
3. SW	*	-15	-21	1.8
4. NE	*	14	17	1.8
5. ES mdblk	*	150	-19	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-21	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	14	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	14	150	1.8
13. ES blk	*	600	-19	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-21	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	14	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	14	600	1.8

JOB: Riverside Walmart Supercenter
RUN: 2007wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	2.0	.2	.0	.0	.0	.0	.0	.7	.1
2. NW	99.	2.3	.0	.2	.0	.7	.0	.0	.0	.1
3. SW	6.	2.6	.0	.1	.0	1.2	.0	.0	.4	.0
4. NE	260.	2.7	.0	.3	.0	.4	.0	.0	.2	.0
5. ES mdblk	277.	1.6	.0	.0	.0	.0	.0	.0	.0	.6
6. WN mdblk	99.	2.3	.0	.0	.0	.0	.0	.0	.1	.1
7. WS mdblk	77.	2.0	.0	.0	.0	.1	.0	.0	.8	.0
8. EN mdblk	264.	1.7	.0	.0	.0	.0	.0	.0	.2	.0
9. SE mdblk	353.	1.4	.4	.0	.1	.3	.0	.0	.0	.0
10. NW mdblk	171.	2.2	.0	.1	.0	1.6	.0	.0	.0	.0
11. SW mdblk	3.	1.1	.0	.0	.0	.3	.2	.0	.0	.0
12. NE mdblk	194.	1.6	.0	.6	.0	.6	.0	.0	.0	.0
13. ES blk	276.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.8	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	82.	1.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.7	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.6	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	1.2	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: 2007wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.3	.0	.2	.0	.0	.0	.0	.0	.1	.0	.0	.3
2. NW	*	.0	.6	.4	.0	.0	.0	.0	.0	.0	.2	.0	.0
3. SW	*	.2	.0	.3	.0	.0	.1	.2	.0	.0	.0	.0	.0
4. NE	*	.3	.1	1.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	*	.1	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	*	.2	.0	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.5	.1	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.1	.7	.2	.0	.0	.0	.0	.0	.1	.0	.0	.1
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.2	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	1.2
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.9	.0	.0	.4
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.6	.0
17. SE blk	*	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.8	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.6	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Old 215 NBA	*	9	-150	9	0	* AG	161	7.9	.0	13.5
B. Old 215 NBD	*	9	0	9	150	* AG	600	5.3	.0	10.0
C. Old 215 NBL	*	5	-150	0	0	* AG	76	10.1	.0	10.0
D. Old 215 SBA	*	-9	150	-9	0	* AG	274	7.9	.0	13.5
E. Old 215 SBD	*	-9	0	-9	-150	* AG	91	5.3	.0	10.0
F. Old 215 SBL	*	-5	150	0	0	* AG	37	10.1	.0	10.0
G. Alessand EBA	*	-150	-9	0	-9	* AG	1643	10.9	.0	13.5
H. Alessand EBD	*	0	-9	150	-9	* AG	1674	8.4	.0	10.0
I. Alessand EBL	*	-150	-5	0	0	* AG	368	11.0	.0	10.0
J. Alessand WBA	*	150	9	0	9	* AG	1271	10.0	.0	13.5
K. Alessand WBD	*	0	9	-150	9	* AG	1478	7.1	.0	10.0
L. Alessand WBL	*	150	5	0	0	* AG	11	10.1	.0	10.0
M. Old 215 NBAX	*	9	-750	9	-150	* AG	237	4.9	.0	13.5
N. Old 215 NBDX	*	9	150	9	750	* AG	600	4.9	.0	10.0
O. Old 215 SBAX	*	-9	750	-9	150	* AG	312	4.9	.0	13.5
P. Old 215 SBDX	*	-9	-150	-9	-750	* AG	91	4.9	.0	10.0
Q. Alessan EBAX	*	-750	-9	-150	-9	* AG	2011	4.9	.0	13.5
R. Alessan EBDX	*	150	-9	750	-9	* AG	1674	4.9	.0	10.0
S. Alessan WBAX	*	750	9	150	9	* AG	1282	4.9	.0	13.5
T. Alessan WBDX	*	-150	9	-750	9	* AG	1478	4.9	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: 2007wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	17	-15	1.8
2. NW	*	-17	15	1.8
3. SW	*	-15	-17	1.8
4. NE	*	15	17	1.8
5. ES mdblk	*	150	-15	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	15	150	1.8
13. ES blk	*	600	-15	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	15	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	3.5	.0	.0	.0	.0	.0	.0	1.9	.5
2. NW	98.	2.8	.0	.1	.0	.1	.0	.0	.0	.4
3. SW	280.	3.2	.0	.0	.0	.0	.0	.0	2.3	.0
4. NE	257.	3.0	.0	.2	.0	.0	.0	.0	.8	.0
5. ES mdblk	278.	3.1	.0	.0	.0	.0	.0	.0	.2	1.9
6. WN mdblk	100.	2.9	.0	.0	.0	.0	.0	.0	.6	.3
7. WS mdblk	81.	3.6	.0	.0	.0	.0	.0	.0	2.3	.1
8. EN mdblk	262.	2.9	.0	.0	.0	.0	.0	.0	.4	.3
9. SE mdblk	353.	1.0	.2	.0	.0	.0	.0	.0	.1	.0
10. NW mdblk	172.	1.0	.0	.0	.0	.3	.0	.0	.0	.1
11. SW mdblk	5.	.9	.0	.0	.0	.0	.0	.0	.1	.0
12. NE mdblk	190.	1.1	.0	.5	.0	.0	.0	.0	.2	.0
13. ES blk	277.	1.9	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.9	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	2.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	1.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.6	.0	.0	.0	.0	.0	.0	.1	.0
18. NW blk	174.	.7	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	1.0	.0	.0	.0	.0	.0	.0	.1	.0

JOB: Riverside Walmart Supercenter
RUN: 2007wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.3	.0	.3	.0	.0	.0	.0	.0	.2	.0	.0	.2
2. NW	*	.0	1.4	.4	.0	.0	.0	.0	.0	.0	.3	.1	.0
3. SW	*	.3	.0	.2	.0	.0	.0	.0	.0	.1	.0	.0	.3
4. NE	*	.3	.5	1.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	*	.0	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	*	.2	.1	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.3	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.1	1.7	.1	.0	.0	.0	.0	.0	.2	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.4	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	1.1
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.0	.0	.4
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.9	.0
17. SE blk	*	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.3	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.5	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	12	-150	12	0	* AG	750	7.3	.0	13.5
B. Day Stre NBD	*	12	0	12	150	* AG	1269	5.2	.0	11.8
C. Day Stre NBL	*	9	-150	0	0	* AG	287	10.1	.0	10.0
D. Day Stre SBA	*	-14	150	-14	0	* AG	932	7.5	.0	17.0
E. Day Stre SBD	*	-14	0	-14	-150	* AG	989	5.2	.0	13.5
F. Day Stre SBL	*	-9	150	0	0	* AG	279	10.1	.0	10.0
G. Campus P EBA	*	-150	-9	0	-9	* AG	318	10.3	.0	10.0
H. Campus P EBD	*	0	-9	150	-9	* AG	460	8.6	.0	10.0
I. Campus P EBL	*	-150	-9	0	0	* AG	400	10.1	.0	10.0
J. Campus P WBA	*	150	9	0	9	* AG	377	9.2	.0	13.5
K. Campus P WBD	*	0	9	-150	9	* AG	699	6.5	.0	10.0
L. Campus P WBL	*	150	5	0	0	* AG	75	10.1	.0	10.0
M. Day Str NBAX	*	12	-750	12	-150	* AG	1037	4.9	.0	13.5
N. Day Str NBDX	*	12	150	12	750	* AG	1269	4.9	.0	11.8
O. Day Str SBAX	*	-14	750	-14	150	* AG	1211	4.9	.0	17.0
P. Day Str SBDX	*	-14	-150	-14	-750	* AG	989	4.9	.0	13.5
Q. Campus EBAX	*	-750	-9	-150	-9	* AG	718	4.9	.0	10.0
R. Campus EBDX	*	150	-9	750	-9	* AG	460	4.9	.0	10.0
S. Campus WBAX	*	750	9	150	9	* AG	451	4.9	.0	13.5
T. Campus WBDX	*	-150	9	-750	9	* AG	699	4.9	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: 2007wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	21	-15	1.8
2. NW	*	-24	15	1.8
3. SW	*	-22	-15	1.8
4. NE	*	20	17	1.8
5. ES mdblk	*	150	-15	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-15	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	21	-150	1.8
10. NW mdblk	*	-24	150	1.8
11. SW mdblk	*	-22	-150	1.8
12. NE mdblk	*	20	150	1.8
13. ES blk	*	600	-15	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-15	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	21	-600	1.8
18. NW blk	*	-24	600	1.8
19. SW blk	*	-22	-600	1.8
20. NE blk	*	20	600	1.8

JOB: Riverside Walmart Supercenter
RUN: 2007wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	350.	1.9	.2	.7	.0	.1	.0	.1	.0	.3
2. NW	169.	1.8	.1	.0	.1	.2	.5	.0	.1	.0
3. SW	8.	2.1	.0	.0	.0	.8	.1	.2	.2	.0
4. NE	259.	1.9	.0	.4	.0	.2	.0	.1	.2	.0
5. ES mdblk	277.	1.4	.0	.0	.0	.0	.0	.0	.0	.6
6. WN mdblk	98.	1.5	.0	.0	.0	.0	.0	.0	.1	.1
7. WS mdblk	80.	1.8	.0	.0	.0	.0	.0	.0	.5	.0
8. EN mdblk	263.	1.3	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	351.	1.7	.8	.0	.2	.2	.0	.0	.0	.0
10. NW mdblk	171.	1.7	.2	.0	.0	.9	.0	.2	.0	.0
11. SW mdblk	8.	1.5	.0	.2	.0	.1	.7	.0	.0	.0
12. NE mdblk	188.	1.7	.0	.9	.0	.0	.1	.1	.0	.0
13. ES blk	276.	.9	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.8	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	1.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	1.5	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: 2007wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.1	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
2. NW	*	.2	.0	.3	.0	.2	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.2	.0	.2	.0	.0	.2	.1	.0	.0	.0	.0	.0
4. NE	*	.3	.2	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.2	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.6	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.1	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.6
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.2
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.4	.0
17. SE blk	*	.0	.0	.0	.0	.8	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.8	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.7	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	1.0	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	9	-150	9	0	* AG	538	8.0	.0	13.5
B. Day Stre NBD	*	9	0	9	150	* AG	897	5.5	.0	10.0
C. Day Stre NBL	*	5	-150	0	0	* AG	56	10.1	.0	10.0
D. Day Stre SBA	*	-9	150	-9	0	* AG	915	8.6	.0	13.5
E. Day Stre SBD	*	-9	0	-9	-150	* AG	642	5.4	.0	10.0
F. Day Stre SBL	*	-5	150	0	0	* AG	198	10.1	.0	10.0
G. Eucalypt EBA	*	-150	-9	0	-9	* AG	618	8.2	.0	13.5
H. Eucalypt EBD	*	0	-9	150	-9	* AG	764	5.4	.0	10.0
I. Eucalypt EBL	*	-150	-5	0	0	* AG	263	10.9	.0	10.0
J. Eucalypt WBA	*	150	9	0	9	* AG	542	8.0	.0	13.5
K. Eucalypt WBD	*	0	9	-150	9	* AG	849	5.5	.0	10.0
L. Eucalypt WBL	*	150	5	0	0	* AG	23	10.1	.0	10.0
M. Day Str NBAX	*	9	-750	9	-150	* AG	594	4.9	.0	13.5
N. Day Str NBDX	*	9	150	9	750	* AG	897	4.9	.0	10.0
O. Day Str SBAX	*	-9	750	-9	150	* AG	1113	4.9	.0	13.5
P. Day Str SBDX	*	-9	-150	-9	-750	* AG	642	4.9	.0	10.0
Q. Eucalyp EBAX	*	-750	-9	-150	-9	* AG	881	4.9	.0	13.5
R. Eucalyp EBDX	*	150	-9	750	-9	* AG	764	4.9	.0	10.0
S. Eucalyp WBAX	*	750	9	150	9	* AG	565	4.9	.0	13.5
T. Eucalyp WBDX	*	-150	9	-750	9	* AG	849	4.9	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: 2007wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	17	-15	1.8
2. NW	*	-17	15	1.8
3. SW	*	-15	-17	1.8
4. NE	*	15	17	1.8
5. ES mdblk	*	150	-15	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	15	150	1.8
13. ES blk	*	600	-15	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	15	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	350.	1.8	.1	.5	.0	.3	.0	.1	.0	.3
2. NW	98.	1.8	.0	.2	.0	.5	.0	.0	.0	.1
3. SW	7.	2.2	.0	.1	.0	.9	.1	.2	.3	.0
4. NE	260.	1.9	.0	.3	.0	.3	.0	.0	.2	.0
5. ES mdblk	277.	1.4	.0	.0	.0	.0	.0	.0	.0	.6
6. WN mdblk	98.	1.5	.0	.0	.0	.0	.0	.0	.2	.1
7. WS mdblk	80.	1.6	.0	.0	.0	.0	.0	.0	.7	.0
8. EN mdblk	263.	1.4	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	353.	1.4	.6	.0	.0	.2	.0	.0	.0	.0
10. NW mdblk	171.	1.8	.1	.1	.0	1.1	.0	.2	.0	.0
11. SW mdblk	6.	1.3	.0	.1	.0	.2	.5	.0	.0	.0
12. NE mdblk	190.	1.6	.0	.7	.0	.3	.0	.1	.0	.0
13. ES blk	276.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	1.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.9	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.9	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	1.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	1.3	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: 2007wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.2	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
2. NW	*	.0	.5	.2	.0	.0	.0	.0	.0	.0	.1	.0	.0
3. SW	*	.1	.0	.2	.0	.0	.2	.1	.0	.0	.0	.0	.0
4. NE	*	.2	.1	.5	.0	.0	.0	.0	.0	.1	.0	.0	.0
5. ES mdblk	*	.0	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.2	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.3	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.2	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.7
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.7	.0	.0	.2
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.5	.0
17. SE blk	*	.0	.0	.0	.0	.5	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.8	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.5	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.7	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	2	-150	2	0	* AG	357	8.2	.0	10.0
B. Day Stre NBD	*	2	0	2	150	* AG	525	5.7	.0	10.0
C. Day Stre NBL	*	2	-150	0	0	* AG	14	10.1	.0	10.0
D. Day Stre SBA	*	-2	150	-2	0	* AG	338	8.2	.0	10.0
E. Day Stre SBD	*	-2	0	-2	-150	* AG	356	5.4	.0	10.0
F. Day Stre SBL	*	-2	150	0	0	* AG	197	10.1	.0	10.0
G. Cottonwo EBA	*	-150	-5	0	-5	* AG	136	7.9	.0	10.0
H. Cottonwo EBD	*	0	-5	150	-5	* AG	336	5.4	.0	10.0
I. Cottonwo EBL	*	-150	-5	0	0	* AG	33	10.1	.0	10.0
J. Cottonwo WBA	*	150	7	0	7	* AG	246	8.0	.0	10.0
K. Cottonwo WBD	*	0	7	-150	7	* AG	128	5.3	.0	10.0
L. Cottonwo WBL	*	150	5	0	0	* AG	24	10.1	.0	10.0
M. Day Str NBAX	*	2	-750	2	-150	* AG	370	4.9	.0	10.0
N. Day Str NBDX	*	2	150	2	750	* AG	525	4.9	.0	10.0
O. Day Str SBAX	*	-2	750	-2	150	* AG	534	4.9	.0	10.0
P. Day Str SBDX	*	-2	-150	-2	-750	* AG	356	4.9	.0	10.0
Q. Cottonw EBAX	*	-750	-5	-150	-5	* AG	170	4.9	.0	10.0
R. Cottonw EBDX	*	150	-5	750	-5	* AG	336	4.9	.0	10.0
S. Cottonw WBAX	*	750	7	150	7	* AG	270	4.9	.0	10.0
T. Cottonw WBDX	*	-150	7	-750	7	* AG	128	4.9	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: 2007wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-12	1.8
2. NW	*	-8	14	1.8
3. SW	*	-8	-12	1.8
4. NE	*	8	14	1.8
5. ES mdblk	*	150	-12	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-12	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-12	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-12	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Riverside Walmart Supercenter
RUN: 2007wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	352.	1.4	.0	.4	.0	.3	.0	.3	.0	.1
2. NW	7.	1.1	.0	.3	.0	.4	.0	.3	.0	.0
3. SW	7.	1.3	.0	.3	.0	.4	.0	.3	.0	.0
4. NE	352.	1.1	.0	.5	.0	.3	.0	.2	.0	.0
5. ES mdblk	279.	.6	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	95.	.5	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	84.	.6	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	263.	.7	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	355.	1.0	.4	.0	.0	.0	.2	.0	.0	.0
10. NW mdblk	172.	1.3	.0	.3	.0	.4	.0	.3	.0	.0
11. SW mdblk	6.	.9	.3	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	187.	1.2	.0	.5	.0	.3	.0	.2	.0	.0
13. ES blk	276.	.6	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.7	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.9	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.7	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.9	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: 2007wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.0
17. SE blk	*	.0	.0	.0	.0	.3	.0	.0	.2	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.3	.5	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.2	.0	.0	.3	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.4	.3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: 2007wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	5	-150	5	0	* AG	44	9.2	.0	10.0
B. Day Stre NBD	*	5	0	5	150	* AG	546	10.1	.0	10.0
C. Day Stre NBL	*	5	-150	0	0	* AG	47	10.1	.0	10.0
D. Day Stre SBA	*	-5	150	-5	0	* AG	195	9.2	.0	10.0
E. Day Stre SBD	*	-5	0	-5	-150	* AG	16	5.7	.0	10.0
F. Day Stre SBL	*	-5	150	0	0	* AG	192	10.1	.0	10.0
G. Alessand EBA	*	-150	-9	0	-9	* AG	1552	8.0	.0	13.5
H. Alessand EBD	*	0	-9	150	-9	* AG	1768	5.3	.0	11.8
I. Alessand EBL	*	-150	-5	0	0	* AG	363	11.0	.0	10.0
J. Alessand WBA	*	150	7	0	7	* AG	1230	8.5	.0	10.0
K. Alessand WBD	*	0	7	-150	7	* AG	1300	5.5	.0	10.0
L. Alessand WBL	*	150	5	0	0	* AG	6	10.1	.0	10.0
M. Day Str NBAX	*	5	-750	5	-150	* AG	91	4.9	.0	10.0
N. Day Str NBDX	*	5	150	5	750	* AG	546	4.9	.0	10.0
O. Day Str SBAX	*	-5	750	-5	150	* AG	388	4.9	.0	10.0
P. Day Str SBDX	*	-5	-150	-5	-750	* AG	16	4.9	.0	10.0
Q. Alessan EBAX	*	-750	-9	-150	-9	* AG	1915	4.9	.0	13.5
R. Alessan EBDX	*	150	-9	750	-9	* AG	1768	4.9	.0	11.8
S. Alessan WBAX	*	750	7	150	7	* AG	1237	4.9	.0	10.0
T. Alessan WBDX	*	-150	7	-750	7	* AG	1300	4.9	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: 2007wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	12	-16	1.8
2. NW	*	-12	14	1.8
3. SW	*	-12	-17	1.8
4. NE	*	12	14	1.8
5. ES mdblk	*	150	-16	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	12	-150	1.8
10. NW mdblk	*	-12	150	1.8
11. SW mdblk	*	-12	-150	1.8
12. NE mdblk	*	12	150	1.8
13. ES blk	*	600	-16	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	12	-600	1.8
18. NW blk	*	-12	600	1.8
19. SW blk	*	-12	-600	1.8
20. NE blk	*	12	600	1.8

JOB: Riverside Walmart Supercenter
RUN: 2007wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	2.6	.0	.0	.0	.0	.0	.0	1.4	.2
2. NW	98.	2.6	.0	.2	.0	.1	.0	.1	.0	.3
3. SW	279.	2.5	.0	.0	.0	.0	.0	.0	1.6	.0
4. NE	259.	2.8	.0	.4	.0	.0	.0	.1	.6	.0
5. ES mdblk	278.	2.3	.0	.0	.0	.0	.0	.0	.2	1.2
6. WN mdblk	98.	2.2	.0	.0	.0	.0	.0	.0	.4	.2
7. WS mdblk	81.	2.8	.0	.0	.0	.0	.0	.0	1.6	.0
8. EN mdblk	263.	2.5	.0	.0	.0	.0	.0	.0	.3	.2
9. SE mdblk	356.	.9	.0	.1	.0	.0	.0	.0	.0	.0
10. NW mdblk	169.	1.3	.0	.4	.0	.3	.0	.3	.0	.1
11. SW mdblk	3.	.8	.0	.1	.0	.0	.0	.0	.1	.0
12. NE mdblk	191.	1.5	.0	.8	.0	.1	.0	.2	.2	.0
13. ES blk	277.	1.9	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	1.8	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	2.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	1.7	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	357.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.8	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	2.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.9	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: 2007wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.3	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	.2
2. NW	*	.0	1.3	.2	.0	.0	.0	.0	.0	.0	.3	.1	.0
3. SW	*	.3	.0	.2	.0	.0	.0	.0	.0	.2	.0	.0	.2
4. NE	*	.3	.3	.8	.0	.0	.0	.0	.0	.2	.0	.0	.0
5. ES mdblk	*	.0	.3	.2	.0	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	*	.2	.1	1.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
7. WS mdblk	*	.3	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.1	1.4	.1	.0	.0	.0	.0	.0	.2	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.3	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	1.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.0	.0	.3
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	1.0	.0
17. SE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.3	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.5	.2	.0	.0	.0	.0	.0

SUPERCENTER AT CANYON CROSSINGS

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

FUTURE YEAR (2025) WITHOUT PROJECT SCENARIO

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumnP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valley S NBA	*	7	-150	7	0	* AG	622	1.9	.0	10.0
B. Valley S NBD	*	7	0	7	150	* AG	0	1.2	.0	10.0
C. Valley S NBL	*	5	-150	0	0	* AG	204	2.2	.0	10.0
D. Valley S SBA	*	-7	150	-7	0	* AG	78	1.8	.0	10.0
E. Valley S SBD	*	-7	0	-7	-150	* AG	876	1.3	.0	10.0
F. Valley S SBL	*	-5	150	0	0	* AG	43	2.2	.0	10.0
G. Corporat EBA	*	-150	-2	0	-2	* AG	213	1.8	.0	10.0
H. Corporat EBD	*	0	-2	150	-2	* AG	736	1.3	.0	10.0
I. Corporat EBL	*	-150	-2	0	0	* AG	0	1.2	.0	10.0
J. Corporat WBA	*	150	7	0	7	* AG	103	1.8	.0	10.0
K. Corporat WBD	*	0	7	-150	7	* AG	307	1.3	.0	10.0
L. Corporat WBL	*	150	5	0	0	* AG	655	2.3	.0	10.0
M. Valley NBAX	*	7	-750	7	-150	* AG	826	1.2	.0	10.0
N. Valley NBDX	*	7	150	7	750	* AG	0	1.2	.0	10.0
O. Valley SBAX	*	-7	750	-7	150	* AG	121	1.2	.0	10.0
P. Valley SBDX	*	-7	-150	-7	-750	* AG	876	1.2	.0	10.0
Q. Corpora EBAX	*	-750	-2	-150	-2	* AG	213	1.2	.0	10.0
R. Corpora EBDX	*	150	-2	750	-2	* AG	736	1.2	.0	10.0
S. Corpora WBAX	*	750	7	150	7	* AG	758	1.2	.0	10.0
T. Corpora WBDX	*	-150	7	-750	7	* AG	307	1.2	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: CumnP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	14	-8	1.8
2. NW	*	-14	14	1.8
3. SW	*	-14	-8	1.8
4. NE	*	14	14	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	14	-150	1.8
10. NW mdblk	*	-14	150	1.8
11. SW mdblk	*	-14	-150	1.8
12. NE mdblk	*	14	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	14	-600	1.8
18. NW blk	*	-14	600	1.8
19. SW blk	*	-14	-600	1.8
20. NE blk	*	14	600	1.8

JOB: Riverside Walmart Supercenter
RUN: CumnP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	81.	.4	.0	.0	.0	.0	.0	.0	.0	.1
2. NW	172.	.3	.0	.0	.0	.0	.1	.0	.0	.0
3. SW	82.	.5	.0	.0	.0	.0	.0	.0	.0	.1
4. NE	187.	.4	.2	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.3	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	87.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	258.	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	349.	.3	.2	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	13.	.3	.0	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	183.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.1	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	87.	.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	177.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	181.	.0	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: CumnP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	*	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumnP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valley S NBA	*	7	-150	7	0	* AG	332	2.0	.0	10.0
B. Valley S NBD	*	7	0	7	150	* AG	855	1.9	.0	10.0
C. Valley S NBL	*	5	-150	0	0	* AG	134	2.2	.0	10.0
D. Valley S SBA	*	-9	150	-9	0	* AG	1285	2.3	.0	13.5
E. Valley S SBD	*	-9	0	-9	-150	* AG	356	1.5	.0	10.0
F. Valley S SBL	*	-5	150	0	0	* AG	45	2.2	.0	10.0
G. Eucalypt EBA	*	-150	-12	0	-12	* AG	1527	2.0	.0	13.5
H. Eucalypt EBD	*	0	-12	150	-12	* AG	1577	1.4	.0	10.0
I. Eucalypt EBL	*	-150	-9	0	0	* AG	574	2.2	.0	10.0
J. Eucalypt WBA	*	150	9	0	9	* AG	1275	1.9	.0	13.5
K. Eucalypt WBD	*	0	9	-150	9	* AG	2423	1.7	.0	10.0
L. Eucalypt WBL	*	150	5	0	0	* AG	41	2.2	.0	10.0
M. Valley NBAX	*	7	-750	7	-150	* AG	466	1.2	.0	10.0
N. Valley NBDX	*	7	150	7	750	* AG	855	1.2	.0	10.0
O. Valley SBAX	*	-9	750	-9	150	* AG	1329	1.2	.0	13.5
P. Valley SBDX	*	-9	-150	-9	-750	* AG	356	1.2	.0	10.0
Q. Eucalyp EBAX	*	-750	-12	-150	-12	* AG	2101	1.2	.0	13.5
R. Eucalyp EBDX	*	150	-12	750	-12	* AG	1577	1.2	.0	10.0
S. Eucalyp WBAX	*	750	9	150	9	* AG	1316	1.2	.0	13.5
T. Eucalyp WBDX	*	-150	9	-750	9	* AG	2423	1.2	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: CumnP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	14	-19	1.8
2. NW	*	-17	15	1.8
3. SW	*	-15	-21	1.8
4. NE	*	14	17	1.8
5. ES mdblk	*	150	-19	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-21	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	14	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	14	150	1.8
13. ES blk	*	600	-19	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-21	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	14	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	14	600	1.8

JOB: Riverside Walmart Supercenter
RUN: CumnP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	.8	.0	.0	.0	.0	.0	.0	.3	.0
2. NW	100.	.8	.0	.0	.0	.2	.0	.0	.0	.0
3. SW	6.	.8	.0	.0	.0	.3	.0	.0	.2	.0
4. NE	259.	.9	.0	.1	.0	.1	.0	.0	.0	.0
5. ES mdblk	278.	.6	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	99.	.8	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	78.	.7	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	263.	.6	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	353.	.4	.1	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	171.	.6	.0	.0	.0	.4	.0	.0	.0	.0
11. SW mdblk	5.	.4	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	193.	.5	.0	.2	.0	.1	.0	.0	.0	.0
13. ES blk	277.	.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	98.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	82.	.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.4	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: CumnP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.2	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.4
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumnP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Old 215 NBA	*	9	-150	9	0	* AG	205	1.8	.0	13.5
B. Old 215 NBD	*	9	0	9	150	* AG	724	1.3	.0	10.0
C. Old 215 NBL	*	5	-150	0	0	* AG	207	2.2	.0	10.0
D. Old 215 SBA	*	-9	150	-9	0	* AG	385	1.8	.0	13.5
E. Old 215 SBD	*	-9	0	-9	-150	* AG	172	1.3	.0	10.0
F. Old 215 SBL	*	-5	150	0	0	* AG	37	2.2	.0	10.0
G. Alessand EBA	*	-150	-9	0	-9	* AG	2259	2.3	.0	13.5
H. Alessand EBD	*	0	-9	150	-9	* AG	2228	2.1	.0	10.0
I. Alessand EBL	*	-150	-5	0	0	* AG	448	2.3	.0	10.0
J. Alessand WBA	*	150	9	0	9	* AG	1957	2.3	.0	13.5
K. Alessand WBD	*	0	9	-150	9	* AG	2385	2.1	.0	10.0
L. Alessand WBL	*	150	5	0	0	* AG	11	2.2	.0	10.0
M. Old 215 NBAX	*	9	-750	9	-150	* AG	412	1.2	.0	13.5
N. Old 215 NBDX	*	9	150	9	750	* AG	724	1.2	.0	10.0
O. Old 215 SBAX	*	-9	750	-9	150	* AG	423	1.2	.0	13.5
P. Old 215 SBDX	*	-9	-150	-9	-750	* AG	172	1.2	.0	10.0
Q. Alessan EBAX	*	-750	-9	-150	-9	* AG	2707	1.2	.0	13.5
R. Alessan EBDX	*	150	-9	750	-9	* AG	2228	1.2	.0	10.0
S. Alessan WBAX	*	750	9	150	9	* AG	1968	1.2	.0	13.5
T. Alessan WBDX	*	-150	9	-750	9	* AG	2385	1.2	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: CumnP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	17	-15	1.8
2. NW	*	-17	15	1.8
3. SW	*	-15	-17	1.8
4. NE	*	15	17	1.8
5. ES mdblk	*	150	-15	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	15	150	1.8
13. ES blk	*	600	-15	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	15	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumnP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	279.	1.0	.0	.0	.0	.0	.0	.0	.5	.2
2. NW	99.	.9	.0	.0	.0	.0	.0	.0	.0	.1
3. SW	280.	.9	.0	.0	.0	.0	.0	.0	.6	.0
4. NE	259.	1.0	.0	.0	.0	.0	.0	.0	.2	.0
5. ES mdblk	278.	1.0	.0	.0	.0	.0	.0	.0	.0	.6
6. WN mdblk	100.	1.0	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	80.	1.0	.0	.0	.0	.0	.0	.0	.7	.0
8. EN mdblk	262.	.9	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	352.	.3	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.3	.0	.0	.0	.1	.0	.0	.0	.0
11. SW mdblk	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	189.	.3	.0	.1	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.6	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.3	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: CumnP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.4	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.2	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.4
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.0
17. SE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumnP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	12	-150	12	0	* AG	1483	1.8	.0	13.5
B. Day Stre NBD	*	12	0	12	150	* AG	1682	1.3	.0	11.8
C. Day Stre NBL	*	9	-150	0	0	* AG	204	2.2	.0	10.0
D. Day Stre SBA	*	-14	150	-14	0	* AG	1213	1.8	.0	17.0
E. Day Stre SBD	*	-14	0	-14	-150	* AG	1559	1.3	.0	13.5
F. Day Stre SBL	*	-9	150	0	0	* AG	417	2.2	.0	10.0
G. Campus P EBA	*	-150	-9	0	-9	* AG	233	2.1	.0	10.0
H. Campus P EBD	*	0	-9	150	-9	* AG	830	2.3	.0	10.0
I. Campus P EBL	*	-150	-9	0	0	* AG	202	2.2	.0	10.0
J. Campus P WBA	*	150	9	0	9	* AG	485	2.1	.0	13.5
K. Campus P WBD	*	0	9	-150	9	* AG	422	1.4	.0	10.0
L. Campus P WBL	*	150	5	0	0	* AG	255	2.2	.0	10.0
M. Day Str NBAX	*	12	-750	12	-150	* AG	1687	1.2	.0	13.5
N. Day Str NBDX	*	12	150	12	750	* AG	1682	1.2	.0	11.8
O. Day Str SBAX	*	-14	750	-14	150	* AG	1630	1.2	.0	17.0
P. Day Str SBDX	*	-14	-150	-14	-750	* AG	1559	1.2	.0	13.5
Q. Campus EBAX	*	-750	-9	-150	-9	* AG	435	1.2	.0	10.0
R. Campus EBDX	*	150	-9	750	-9	* AG	830	1.2	.0	10.0
S. Campus WBAX	*	750	9	150	9	* AG	740	1.2	.0	13.5
T. Campus WBDX	*	-150	9	-750	9	* AG	422	1.2	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: CumnP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	21	-15	1.8
2. NW	*	-24	15	1.8
3. SW	*	-22	-15	1.8
4. NE	*	20	17	1.8
5. ES mdblk	*	150	-15	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-15	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	21	-150	1.8
10. NW mdblk	*	-24	150	1.8
11. SW mdblk	*	-22	-150	1.8
12. NE mdblk	*	20	150	1.8
13. ES blk	*	600	-15	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-15	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	21	-600	1.8
18. NW blk	*	-24	600	1.8
19. SW blk	*	-22	-600	1.8
20. NE blk	*	20	600	1.8

JOB: Riverside Walmart Supercenter
RUN: CumnP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	349.	.7	.0	.2	.0	.0	.0	.0	.0	.1
2. NW	98.	.5	.0	.0	.0	.1	.0	.0	.0	.0
3. SW	82.	.6	.0	.0	.0	.0	.1	.0	.0	.2
4. NE	188.	.7	.3	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	279.	.5	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	96.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	84.	.4	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	259.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.6	.3	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	170.	.5	.0	.0	.0	.3	.0	.0	.0	.0
11. SW mdblk	9.	.5	.0	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	188.	.5	.0	.3	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	8.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.5	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: CumnP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
17. SE blk	*	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumnP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	9	-150	9	0	* AG	1091	2.0	.0	13.5
B. Day Stre NBD	*	9	0	9	150	* AG	1620	1.9	.0	10.0
C. Day Stre NBL	*	5	-150	0	0	* AG	257	2.2	.0	10.0
D. Day Stre SBA	*	-9	150	-9	0	* AG	1627	2.2	.0	13.5
E. Day Stre SBD	*	-9	0	-9	-150	* AG	1347	1.5	.0	10.0
F. Day Stre SBL	*	-5	150	0	0	* AG	243	2.2	.0	10.0
G. Eucalypt EBA	*	-150	-9	0	-9	* AG	1035	2.0	.0	13.5
H. Eucalypt EBD	*	0	-9	150	-9	* AG	1150	1.4	.0	10.0
I. Eucalypt EBL	*	-150	-5	0	0	* AG	559	2.3	.0	10.0
J. Eucalypt WBA	*	150	9	0	9	* AG	646	1.9	.0	13.5
K. Eucalypt WBD	*	0	9	-150	9	* AG	1407	1.7	.0	10.0
L. Eucalypt WBL	*	150	5	0	0	* AG	67	2.2	.0	10.0
M. Day Str NBAX	*	9	-750	9	-150	* AG	1347	1.2	.0	13.5
N. Day Str NBDX	*	9	150	9	750	* AG	1620	1.2	.0	10.0
O. Day Str SBAX	*	-9	750	-9	150	* AG	1870	1.2	.0	13.5
P. Day Str SBDX	*	-9	-150	-9	-750	* AG	1347	1.2	.0	10.0
Q. Eucalyp EBAX	*	-750	-9	-150	-9	* AG	1594	1.2	.0	13.5
R. Eucalyp EBDX	*	150	-9	750	-9	* AG	1150	1.2	.0	10.0
S. Eucalyp WBAX	*	750	9	150	9	* AG	713	1.2	.0	13.5
T. Eucalyp WBDX	*	-150	9	-750	9	* AG	1407	1.2	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: CumnP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	17	-15	1.8
2. NW	*	-17	15	1.8
3. SW	*	-15	-17	1.8
4. NE	*	15	17	1.8
5. ES mdblk	*	150	-15	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	15	150	1.8
13. ES blk	*	600	-15	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	15	600	1.8

JOB: Riverside Walmart Supercenter
RUN: CumnP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	350.	.8	.0	.3	.0	.1	.0	.0	.0	.1
2. NW	169.	.8	.0	.0	.0	.1	.2	.0	.0	.0
3. SW	8.	.9	.0	.0	.0	.4	.0	.0	.1	.0
4. NE	260.	.9	.0	.2	.0	.1	.0	.0	.0	.0
5. ES mdblk	277.	.5	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	99.	.6	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	79.	.6	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.6	.3	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	171.	.8	.0	.0	.0	.5	.0	.0	.0	.0
11. SW mdblk	7.	.6	.0	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	190.	.8	.0	.4	.0	.1	.0	.0	.0	.0
13. ES blk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.5	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.5	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.5	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: CumnP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
17. SE blk	*	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.3	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumnP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	2	-150	2	0	AG	1049	2.3	.0	10.0
B. Day Stre NBD	2	0	2	150	AG	1246	2.1	.0	10.0
C. Day Stre NBL	2	-150	0	0	AG	14	2.2	.0	10.0
D. Day Stre SBA	-2	150	-2	0	AG	695	2.1	.0	10.0
E. Day Stre SBD	-2	0	-2	-150	AG	746	1.7	.0	10.0
F. Day Stre SBL	-2	150	0	0	AG	443	2.3	.0	10.0
G. Cottonwo EBA	-150	-5	0	-5	AG	136	1.8	.0	10.0
H. Cottonwo EBD	0	-5	150	-5	AG	704	1.7	.0	10.0
I. Cottonwo EBL	-150	-5	0	0	AG	33	2.2	.0	10.0
J. Cottonwo WBA	150	7	0	7	AG	396	1.9	.0	10.0
K. Cottonwo WBD	0	7	-150	7	AG	128	1.3	.0	10.0
L. Cottonwo WBL	150	5	0	0	AG	57	2.2	.0	10.0
M. Day Str NBAX	2	-750	2	-150	AG	1063	1.2	.0	10.0
N. Day Str NBDX	2	150	2	750	AG	1246	1.2	.0	10.0
O. Day Str SBAX	-2	750	-2	150	AG	1139	1.2	.0	10.0
P. Day Str SBDX	-2	-150	-2	-750	AG	746	1.2	.0	10.0
Q. Cottonw EBAX	-750	-5	-150	-5	AG	170	1.2	.0	10.0
R. Cottonw EBDX	150	-5	750	-5	AG	704	1.2	.0	10.0
S. Cottonw WBAX	750	7	150	7	AG	453	1.2	.0	10.0
T. Cottonw WBDX	-150	7	-750	7	AG	128	1.2	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: CumnP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-12	1.8
2. NW	*	-8	14	1.8
3. SW	*	-8	-12	1.8
4. NE	*	8	14	1.8
5. ES mdblk	*	150	-12	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-12	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-12	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-12	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

JOB: Riverside Walmart Supercenter
RUN: CumnP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	352.	.8	.0	.3	.0	.1	.0	.1	.0	.0
2. NW	8.	.6	.0	.2	.0	.2	.0	.1	.0	.0
3. SW	8.	.7	.0	.2	.0	.2	.0	.1	.0	.0
4. NE	351.	.7	.0	.4	.0	.1	.0	.1	.0	.0
5. ES mdblk	280.	.3	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	94.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	85.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	260.	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.6	.3	.0	.0	.0	.1	.0	.0	.0
10. NW mdblk	172.	.7	.0	.2	.0	.2	.0	.2	.0	.0
11. SW mdblk	6.	.6	.2	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	188.	.7	.0	.4	.0	.1	.0	.1	.0	.0
13. ES blk	277.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	93.	.1	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.4	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: CumnP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	*	.0	.0	.0	.0	.2	.0	.0	.1	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumnP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	5	-150	5	0	* AG	131	2.0	.0	10.0
B. Day Stre NBD	*	5	0	5	150	* AG	1239	2.3	.0	10.0
C. Day Stre NBL	*	5	-150	0	0	* AG	47	2.2	.0	10.0
D. Day Stre SBA	*	-5	150	-5	0	* AG	556	2.3	.0	10.0
E. Day Stre SBD	*	-5	0	-5	-150	* AG	57	1.4	.0	10.0
F. Day Stre SBL	*	-5	150	0	0	* AG	222	2.2	.0	10.0
G. Alessand EBA	*	-150	-9	0	-9	* AG	1714	1.8	.0	13.5
H. Alessand EBD	*	0	-9	150	-9	* AG	1960	1.3	.0	11.8
I. Alessand EBL	*	-150	-5	0	0	* AG	755	2.3	.0	10.0
J. Alessand WBA	*	150	7	0	7	* AG	1810	2.2	.0	10.0
K. Alessand WBD	*	0	7	-150	7	* AG	1986	1.7	.0	10.0
L. Alessand WBL	*	150	5	0	0	* AG	6	2.2	.0	10.0
M. Day Str NBAX	*	5	-750	5	-150	* AG	178	1.2	.0	10.0
N. Day Str NBDX	*	5	150	5	750	* AG	1239	1.2	.0	10.0
O. Day Str SBAX	*	-5	750	-5	150	* AG	779	1.2	.0	10.0
P. Day Str SBDX	*	-5	-150	-5	-750	* AG	57	1.2	.0	10.0
Q. Alessan EBAX	*	-750	-9	-150	-9	* AG	2469	1.2	.0	13.5
R. Alessan EBDX	*	150	-9	750	-9	* AG	1960	1.2	.0	11.8
S. Alessan WBAX	*	750	7	150	7	* AG	1817	1.2	.0	10.0
T. Alessan WBDX	*	-150	7	-750	7	* AG	1986	1.2	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: CumnP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	12	-16	1.8
2. NW	*	-12	14	1.8
3. SW	*	-12	-17	1.8
4. NE	*	12	14	1.8
5. ES mdblk	*	150	-16	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	12	-150	1.8
10. NW mdblk	*	-12	150	1.8
11. SW mdblk	*	-12	-150	1.8
12. NE mdblk	*	12	150	1.8
13. ES blk	*	600	-16	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	12	-600	1.8
18. NW blk	*	-12	600	1.8
19. SW blk	*	-12	-600	1.8
20. NE blk	*	12	600	1.8

JOB: Riverside Walmart Supercenter
RUN: CumnP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	353.	.8	.0	.3	.0	.0	.0	.0	.0	.2
2. NW	98.	.9	.0	.1	.0	.0	.0	.0	.0	.0
3. SW	8.	.8	.0	.1	.0	.2	.0	.0	.2	.0
4. NE	259.	1.1	.0	.2	.0	.0	.0	.0	.1	.0
5. ES mdblk	278.	.7	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	98.	.8	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	80.	.8	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	263.	.8	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	356.	.3	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	168.	.5	.0	.2	.0	.2	.0	.0	.0	.0
11. SW mdblk	3.	.3	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	192.	.6	.0	.4	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.6	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	357.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	2.	.1	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.4	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: CumnP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.1	.1	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

SUPERCENTER AT CANYON CROSSINGS

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

FUTURE YEAR (2025) WITH PROJECT SCENARIO

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumwP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valley S NBA	*	7	-150	7	0	* AG	900	1.8	.0	10.0
B. Valley S NBD	*	7	0	7	150	* AG	298	1.3	.0	10.0
C. Valley S NBL	*	5	-150	0	0	* AG	204	2.2	.0	10.0
D. Valley S SBA	*	-7	150	-7	0	* AG	346	1.7	.0	10.0
E. Valley S SBD	*	-7	0	-7	-150	* AG	1159	1.3	.0	10.0
F. Valley S SBL	*	-5	150	0	0	* AG	72	2.2	.0	10.0
G. Corporat EBA	*	-150	-2	0	-2	* AG	213	2.0	.0	10.0
H. Corporat EBD	*	0	-2	150	-2	* AG	774	1.5	.0	10.0
I. Corporat EBL	*	-150	-2	0	0	* AG	0	1.2	.0	10.0
J. Corporat WBA	*	150	9	0	9	* AG	132	2.0	.0	10.0
K. Corporat WBD	*	0	9	-150	9	* AG	307	1.5	.0	10.0
L. Corporat WBL	*	150	9	0	0	* AG	670	2.3	.0	10.0
M. Valley NBAX	*	7	-750	7	-150	* AG	1104	1.2	.0	10.0
N. Valley NBDX	*	7	150	7	750	* AG	298	1.2	.0	10.0
O. Valley SBAX	*	-7	750	-7	150	* AG	418	1.2	.0	10.0
P. Valley SBDX	*	-7	-150	-7	-750	* AG	1159	1.2	.0	10.0
Q. Corpora EBAX	*	-750	-2	-150	-2	* AG	213	1.2	.0	10.0
R. Corpora EBDX	*	150	-2	750	-2	* AG	774	1.2	.0	10.0
S. Corpora WBAX	*	750	9	150	9	* AG	802	1.2	.0	10.0
T. Corpora WBDX	*	-150	9	-750	9	* AG	307	1.2	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: CumwP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	14	-8	1.8
2. NW	*	-14	15	1.8
3. SW	*	-14	-8	1.8
4. NE	*	14	15	1.8
5. ES mdblk	*	150	-8	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-8	1.8
8. EN mdblk	*	150	15	1.8
9. SE mdblk	*	14	-150	1.8
10. NW mdblk	*	-14	150	1.8
11. SW mdblk	*	-14	-150	1.8
12. NE mdblk	*	14	150	1.8
13. ES blk	*	600	-8	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-8	1.8
16. EN blk	*	600	15	1.8
17. SE blk	*	14	-600	1.8
18. NW blk	*	-14	600	1.8
19. SW blk	*	-14	-600	1.8
20. NE blk	*	14	600	1.8

JOB: Riverside Walmart Supercenter
RUN: CumwP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	188.	.4	.2	.0	.0	.0	.0	.0	.0	.0
2. NW	172.	.4	.0	.0	.0	.0	.2	.0	.0	.0
3. SW	82.	.6	.0	.0	.0	.0	.1	.0	.0	.1
4. NE	187.	.5	.2	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.3	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	87.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	258.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	351.	.4	.2	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	12.	.4	.0	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	185.	.3	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	87.	.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: CumwP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	*	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumwP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Valley S NBA	*	7	-150	7	0	* AG	388	1.8	.0	10.0
B. Valley S NBD	*	7	0	7	150	* AG	1133	1.4	.0	10.0
C. Valley S NBL	*	5	-150	0	0	* AG	134	2.2	.0	10.0
D. Valley S SBA	*	-9	150	-9	0	* AG	1568	2.2	.0	13.5
E. Valley S SBD	*	-9	0	-9	-150	* AG	413	1.3	.0	10.0
F. Valley S SBL	*	-5	150	0	0	* AG	45	2.2	.0	10.0
G. Eucalypt EBA	*	-150	-12	0	-12	* AG	1527	2.2	.0	13.5
H. Eucalypt EBD	*	0	-12	150	-12	* AG	1577	1.7	.0	10.0
I. Eucalypt EBL	*	-150	-9	0	0	* AG	796	2.3	.0	10.0
J. Eucalypt WBA	*	150	9	0	9	* AG	1275	2.1	.0	13.5
K. Eucalypt WBD	*	0	9	-150	9	* AG	2649	2.1	.0	10.0
L. Eucalypt WBL	*	150	5	0	0	* AG	41	2.2	.0	10.0
M. Valley NBAX	*	7	-750	7	-150	* AG	522	1.2	.0	10.0
N. Valley NBDX	*	7	150	7	750	* AG	1133	1.2	.0	10.0
O. Valley SBAX	*	-9	750	-9	150	* AG	1612	1.2	.0	13.5
P. Valley SBDX	*	-9	-150	-9	-750	* AG	413	1.2	.0	10.0
Q. Eucalyp EBAX	*	-750	-12	-150	-12	* AG	2323	1.2	.0	13.5
R. Eucalyp EBDX	*	150	-12	750	-12	* AG	1577	1.2	.0	10.0
S. Eucalyp WBAX	*	750	9	150	9	* AG	1316	1.2	.0	13.5
T. Eucalyp WBDX	*	-150	9	-750	9	* AG	2649	1.2	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: CumwP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	14	-19	1.8
2. NW	*	-17	15	1.8
3. SW	*	-15	-21	1.8
4. NE	*	14	17	1.8
5. ES mdblk	*	150	-19	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-21	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	14	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	14	150	1.8
13. ES blk	*	600	-19	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-21	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	14	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	14	600	1.8

JOB: Riverside Walmart Supercenter
RUN: CumwP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	279.	.9	.0	.0	.0	.0	.0	.0	.4	.0
2. NW	257.	1.0	.0	.0	.0	.0	.0	.0	.1	.0
3. SW	6.	1.0	.0	.0	.0	.3	.0	.0	.2	.0
4. NE	258.	1.1	.0	.1	.0	.1	.0	.0	.1	.0
5. ES mdblk	278.	.7	.0	.0	.0	.0	.0	.0	.0	.4
6. WN mdblk	100.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	77.	.9	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	263.	.7	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	353.	.4	.1	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	171.	.7	.0	.0	.0	.5	.0	.0	.0	.0
11. SW mdblk	3.	.4	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	194.	.6	.0	.2	.0	.2	.0	.0	.0	.0
13. ES blk	277.	.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	82.	.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.4	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: CumwP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.1	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.1	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.7	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.2	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.4
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	*	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumwP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Old 215 NBA	*	9	-150	9	0	* AG	205	2.0	.0	13.5
B. Old 215 NBD	*	9	0	9	150	* AG	780	1.5	.0	10.0
C. Old 215 NBL	*	5	-150	0	0	* AG	207	2.2	.0	10.0
D. Old 215 SBA	*	-9	150	-9	0	* AG	442	2.1	.0	13.5
E. Old 215 SBD	*	-9	0	-9	-150	* AG	172	1.4	.0	10.0
F. Old 215 SBL	*	-5	150	0	0	* AG	37	2.2	.0	10.0
G. Alessand EBA	*	-150	-9	0	-9	* AG	2287	2.2	.0	13.5
H. Alessand EBD	*	0	-9	150	-9	* AG	2256	1.7	.0	10.0
I. Alessand EBL	*	-150	-5	0	0	* AG	504	2.3	.0	10.0
J. Alessand WBA	*	150	11	0	11	* AG	1985	1.9	.0	17.0
K. Alessand WBD	*	0	11	-150	11	* AG	2470	1.5	.0	13.5
L. Alessand WBL	*	150	5	0	0	* AG	11	2.2	.0	10.0
M. Old 215 NBAX	*	9	-750	9	-150	* AG	412	1.2	.0	13.5
N. Old 215 NBDX	*	9	150	9	750	* AG	780	1.2	.0	10.0
O. Old 215 SBAX	*	-9	750	-9	150	* AG	480	1.2	.0	13.5
P. Old 215 SBDX	*	-9	-150	-9	-750	* AG	172	1.2	.0	10.0
Q. Alessan EBAX	*	-750	-9	-150	-9	* AG	2791	1.2	.0	13.5
R. Alessan EBDX	*	150	-9	750	-9	* AG	2256	1.2	.0	10.0
S. Alessan WBAX	*	750	11	150	11	* AG	1996	1.2	.0	17.0
T. Alessan WBDX	*	-150	11	-750	11	* AG	2470	1.2	.0	13.5

JOB: Riverside Walmart Supercenter
RUN: CumwP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	17	-15	1.8
2. NW	*	-17	19	1.8
3. SW	*	-15	-17	1.8
4. NE	*	15	21	1.8
5. ES mdblk	*	150	-15	1.8
6. WN mdblk	*	-150	19	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	21	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	15	150	1.8
13. ES blk	*	600	-15	1.8
14. WN blk	*	-600	19	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	21	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	15	600	1.8

JOB: Riverside Walmart Supercenter
RUN: CumwP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.0	.0	.0	.0	.0	.0	.0	.5	.1
2. NW	98.	.8	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	280.	.9	.0	.0	.0	.0	.0	.0	.6	.0
4. NE	257.	.8	.0	.0	.0	.0	.0	.0	.2	.0
5. ES mdblk	278.	.8	.0	.0	.0	.0	.0	.0	.0	.5
6. WN mdblk	100.	.8	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	80.	1.0	.0	.0	.0	.0	.0	.0	.6	.0
8. EN mdblk	262.	.8	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	352.	.3	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.3	.0	.0	.0	.1	.0	.0	.0	.0
11. SW mdblk	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	190.	.4	.0	.2	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.6	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	98.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	82.	.7	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.3	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: CumwP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.4	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.1	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.4
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0
17. SE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumwP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	12	-150	12	0	* AG	1483	1.8	.0	13.5
B. Day Stre NBD	*	12	0	12	150	* AG	1880	1.3	.0	11.8
C. Day Stre NBL	*	9	-150	0	0	* AG	287	2.2	.0	10.0
D. Day Stre SBA	*	-14	150	-14	0	* AG	1407	1.8	.0	17.0
E. Day Stre SBD	*	-14	0	-14	-150	* AG	1644	1.3	.0	13.5
F. Day Stre SBL	*	-9	150	0	0	* AG	417	2.2	.0	10.0
G. Campus P EBA	*	-150	-9	0	-9	* AG	318	2.2	.0	10.0
H. Campus P EBD	*	0	-9	150	-9	* AG	830	2.3	.0	10.0
I. Campus P EBL	*	-150	-9	0	0	* AG	400	2.2	.0	10.0
J. Campus P WBA	*	150	9	0	9	* AG	485	2.1	.0	13.5
K. Campus P WBD	*	0	9	-150	9	* AG	699	1.5	.0	10.0
L. Campus P WBL	*	150	5	0	0	* AG	255	2.2	.0	10.0
M. Day Str NBAX	*	12	-750	12	-150	* AG	1770	1.2	.0	13.5
N. Day Str NBDX	*	12	150	12	750	* AG	1880	1.2	.0	11.8
O. Day Str SBAX	*	-14	750	-14	150	* AG	1824	1.2	.0	17.0
P. Day Str SBDX	*	-14	-150	-14	-750	* AG	1644	1.2	.0	13.5
Q. Campus EBAX	*	-750	-9	-150	-9	* AG	718	1.2	.0	10.0
R. Campus EBDX	*	150	-9	750	-9	* AG	830	1.2	.0	10.0
S. Campus WBAX	*	750	9	150	9	* AG	740	1.2	.0	13.5
T. Campus WBDX	*	-150	9	-750	9	* AG	699	1.2	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: CumwP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	21	-15	1.8
2. NW	*	-24	15	1.8
3. SW	*	-22	-15	1.8
4. NE	*	20	17	1.8
5. ES mdblk	*	150	-15	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-15	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	21	-150	1.8
10. NW mdblk	*	-24	150	1.8
11. SW mdblk	*	-22	-150	1.8
12. NE mdblk	*	20	150	1.8
13. ES blk	*	600	-15	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-15	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	21	-600	1.8
18. NW blk	*	-24	600	1.8
19. SW blk	*	-22	-600	1.8
20. NE blk	*	20	600	1.8

JOB: Riverside Walmart Supercenter
RUN: CumwP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	349.	.7	.0	.2	.0	.0	.0	.0	.0	.1
2. NW	99.	.6	.0	.0	.0	.2	.0	.0	.0	.0
3. SW	8.	.6	.0	.0	.0	.3	.0	.0	.0	.0
4. NE	188.	.7	.3	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.5	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	97.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	82.	.5	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	261.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	351.	.6	.4	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	170.	.6	.0	.0	.0	.3	.0	.0	.0	.0
11. SW mdblk	8.	.5	.0	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	188.	.6	.0	.3	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.5	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.5	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: CumwP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
17. SE blk	*	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumwP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	9	-150	9	0	* AG	1147	2.0	.0	13.5
B. Day Stre NBD	*	9	0	9	150	* AG	1704	1.9	.0	10.0
C. Day Stre NBL	*	5	-150	0	0	* AG	257	2.2	.0	10.0
D. Day Stre SBA	*	-9	150	-9	0	* AG	1684	2.2	.0	13.5
E. Day Stre SBD	*	-9	0	-9	-150	* AG	1404	1.7	.0	10.0
F. Day Stre SBL	*	-5	150	0	0	* AG	271	2.2	.0	10.0
G. Eucalypt EBA	*	-150	-9	0	-9	* AG	1035	2.0	.0	13.5
H. Eucalypt EBD	*	0	-9	150	-9	* AG	1178	1.4	.0	10.0
I. Eucalypt EBL	*	-150	-5	0	0	* AG	559	2.3	.0	10.0
J. Eucalypt WBA	*	150	9	0	9	* AG	674	1.9	.0	13.5
K. Eucalypt WBD	*	0	9	-150	9	* AG	1407	1.7	.0	10.0
L. Eucalypt WBL	*	150	5	0	0	* AG	67	2.2	.0	10.0
M. Day Str NBAX	*	9	-750	9	-150	* AG	1403	1.2	.0	13.5
N. Day Str NBDX	*	9	150	9	750	* AG	1704	1.2	.0	10.0
O. Day Str SBAX	*	-9	750	-9	150	* AG	1955	1.2	.0	13.5
P. Day Str SBDX	*	-9	-150	-9	-750	* AG	1404	1.2	.0	10.0
Q. Eucalyp EBAX	*	-750	-9	-150	-9	* AG	1594	1.2	.0	13.5
R. Eucalyp EBDX	*	150	-9	750	-9	* AG	1178	1.2	.0	10.0
S. Eucalyp WBAX	*	750	9	150	9	* AG	741	1.2	.0	13.5
T. Eucalyp WBDX	*	-150	9	-750	9	* AG	1407	1.2	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: CumwP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	17	-15	1.8
2. NW	*	-17	15	1.8
3. SW	*	-15	-17	1.8
4. NE	*	15	17	1.8
5. ES mdblk	*	150	-15	1.8
6. WN mdblk	*	-150	15	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	17	1.8
9. SE mdblk	*	17	-150	1.8
10. NW mdblk	*	-17	150	1.8
11. SW mdblk	*	-15	-150	1.8
12. NE mdblk	*	15	150	1.8
13. ES blk	*	600	-15	1.8
14. WN blk	*	-600	15	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	17	1.8
17. SE blk	*	17	-600	1.8
18. NW blk	*	-17	600	1.8
19. SW blk	*	-15	-600	1.8
20. NE blk	*	15	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumwP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	349.	.8	.0	.3	.0	.1	.0	.0	.0	.1
2. NW	169.	.8	.0	.0	.0	.1	.2	.0	.0	.0
3. SW	8.	1.0	.0	.0	.0	.4	.0	.0	.1	.0
4. NE	260.	.9	.0	.2	.0	.1	.0	.0	.0	.0
5. ES mdblk	277.	.5	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	99.	.6	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	79.	.6	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.7	.3	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	171.	.8	.0	.0	.0	.5	.0	.0	.0	.0
11. SW mdblk	7.	.7	.0	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	190.	.8	.0	.4	.0	.1	.0	.0	.0	.0
13. ES blk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.5	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.5	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.5	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: CumwP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
17. SE blk	*	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.3	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumwP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	2	-150	2	0	* AG	1077	2.3	.0	10.0
B. Day Stre NBD	*	2	0	2	150	* AG	1302	2.1	.0	10.0
C. Day Stre NBL	*	2	-150	0	0	* AG	14	2.2	.0	10.0
D. Day Stre SBA	*	-2	150	-2	0	* AG	723	2.2	.0	10.0
E. Day Stre SBD	*	-2	0	-2	-150	* AG	774	1.7	.0	10.0
F. Day Stre SBL	*	-2	150	0	0	* AG	471	2.3	.0	10.0
G. Cottonwo EBA	*	-150	-5	0	-5	* AG	136	1.8	.0	10.0
H. Cottonwo EBD	*	0	-5	150	-5	* AG	732	1.7	.0	10.0
I. Cottonwo EBL	*	-150	-5	0	0	* AG	33	2.2	.0	10.0
J. Cottonwo WBA	*	150	7	0	7	* AG	424	1.9	.0	10.0
K. Cottonwo WBD	*	0	7	-150	7	* AG	128	1.3	.0	10.0
L. Cottonwo WBL	*	150	5	0	0	* AG	57	2.2	.0	10.0
M. Day Str NBAX	*	2	-750	2	-150	* AG	1091	1.2	.0	10.0
N. Day Str NBDX	*	2	150	2	750	* AG	1302	1.2	.0	10.0
O. Day Str SBAX	*	-2	750	-2	150	* AG	1195	1.2	.0	10.0
P. Day Str SBDX	*	-2	-150	-2	-750	* AG	774	1.2	.0	10.0
Q. Cottonw EBAX	*	-750	-5	-150	-5	* AG	170	1.2	.0	10.0
R. Cottonw EBDX	*	150	-5	750	-5	* AG	732	1.2	.0	10.0
S. Cottonw WBAX	*	750	7	150	7	* AG	481	1.2	.0	10.0
T. Cottonw WBDX	*	-150	7	-750	7	* AG	128	1.2	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: CumwP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	8	-12	1.8
2. NW	*	-8	14	1.8
3. SW	*	-8	-12	1.8
4. NE	*	8	14	1.8
5. ES mdblk	*	150	-12	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-12	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	8	-150	1.8
10. NW mdblk	*	-8	150	1.8
11. SW mdblk	*	-8	-150	1.8
12. NE mdblk	*	8	150	1.8
13. ES blk	*	600	-12	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-12	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	8	-600	1.8
18. NW blk	*	-8	600	1.8
19. SW blk	*	-8	-600	1.8
20. NE blk	*	8	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumwP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	352.	.9	.0	.3	.0	.2	.0	.1	.0	.0
2. NW	8.	.7	.0	.2	.0	.2	.0	.1	.0	.0
3. SW	8.	.7	.0	.2	.0	.2	.0	.1	.0	.0
4. NE	351.	.7	.0	.4	.0	.1	.0	.1	.0	.0
5. ES mdblk	280.	.3	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	94.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	85.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	260.	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.6	.3	.0	.0	.0	.1	.0	.0	.0
10. NW mdblk	172.	.8	.0	.2	.0	.2	.0	.2	.0	.0
11. SW mdblk	6.	.6	.2	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	188.	.7	.0	.4	.0	.1	.0	.1	.0	.0
13. ES blk	277.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	93.	.1	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.5	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: CumwP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
17. SE blk	*	.0	.0	.0	.0	.2	.0	.0	.1	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Riverside Walmart Supercenter
RUN: CumwP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	476. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Day Stre NBA	*	5	-150	5	0	* AG	131	2.0	.0	10.0
B. Day Stre NBD	*	5	0	5	150	* AG	1267	2.3	.0	10.0
C. Day Stre NBL	*	5	-150	0	0	* AG	47	2.2	.0	10.0
D. Day Stre SBA	*	-5	150	-5	0	* AG	584	2.3	.0	10.0
E. Day Stre SBD	*	-5	0	-5	-150	* AG	57	1.4	.0	10.0
F. Day Stre SBL	*	-5	150	0	0	* AG	222	2.2	.0	10.0
G. Alessand EBA	*	-150	-9	0	-9	* AG	1714	1.8	.0	13.5
H. Alessand EBD	*	0	-9	150	-9	* AG	1960	1.3	.0	11.8
I. Alessand EBL	*	-150	-5	0	0	* AG	783	2.3	.0	10.0
J. Alessand WBA	*	150	7	0	7	* AG	1810	2.2	.0	10.0
K. Alessand WBD	*	0	7	-150	7	* AG	2014	1.7	.0	10.0
L. Alessand WBL	*	150	5	0	0	* AG	6	2.2	.0	10.0
M. Day Str NBAX	*	5	-750	5	-150	* AG	178	1.2	.0	10.0
N. Day Str NBDX	*	5	150	5	750	* AG	1267	1.2	.0	10.0
O. Day Str SBAX	*	-5	750	-5	150	* AG	807	1.2	.0	10.0
P. Day Str SBDX	*	-5	-150	-5	-750	* AG	57	1.2	.0	10.0
Q. Alessan EBAX	*	-750	-9	-150	-9	* AG	2497	1.2	.0	13.5
R. Alessan EBDX	*	150	-9	750	-9	* AG	1960	1.2	.0	11.8
S. Alessan WBAX	*	750	7	150	7	* AG	1817	1.2	.0	10.0
T. Alessan WBDX	*	-150	7	-750	7	* AG	2014	1.2	.0	10.0

JOB: Riverside Walmart Supercenter
RUN: CumwP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. SE	*	12	-16	1.8
2. NW	*	-12	14	1.8
3. SW	*	-12	-17	1.8
4. NE	*	12	14	1.8
5. ES mdblk	*	150	-16	1.8
6. WN mdblk	*	-150	14	1.8
7. WS mdblk	*	-150	-17	1.8
8. EN mdblk	*	150	14	1.8
9. SE mdblk	*	12	-150	1.8
10. NW mdblk	*	-12	150	1.8
11. SW mdblk	*	-12	-150	1.8
12. NE mdblk	*	12	150	1.8
13. ES blk	*	600	-16	1.8
14. WN blk	*	-600	14	1.8
15. WS blk	*	-600	-17	1.8
16. EN blk	*	600	14	1.8
17. SE blk	*	12	-600	1.8
18. NW blk	*	-12	600	1.8
19. SW blk	*	-12	-600	1.8
20. NE blk	*	12	600	1.8

JOB: Riverside Walmart Supercenter
RUN: CumwP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	353.	.8	.0	.3	.0	.0	.0	.0	.0	.2
2. NW	98.	.9	.0	.1	.0	.0	.0	.0	.0	.0
3. SW	8.	.8	.0	.1	.0	.2	.0	.0	.2	.0
4. NE	259.	1.1	.0	.2	.0	.0	.0	.0	.1	.0
5. ES mdblk	278.	.7	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	98.	.8	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	80.	.8	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	263.	.8	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	356.	.3	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	168.	.6	.0	.2	.0	.2	.0	.0	.0	.0
11. SW mdblk	3.	.3	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	192.	.7	.0	.4	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.6	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	357.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	2.	.1	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.4	.0	.0	.0	.0	.0	.0	.0	.0

JOB: Riverside Walmart Supercenter
RUN: CumwP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	*	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	*	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	*	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	*	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	*	.1	.1	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	*	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	*	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	*	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0
14. WN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.3
15. WS blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.1
16. EN blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.0
17. SE blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	*	.0	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0
19. SW blk	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	*	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

APPENDIX E

SCREENING HEALTH RISK ASSESSMENT

Diesel Toxics Analysis

The following discussion of diesel toxics evaluates two issues: (1) the general health risks of air toxics and the current contribution of diesel trucks to those risks; and (2) the project's potential air toxics impact.

Determining how hazardous a substance is depends on many factors, including the amount of the substance in the air, how it enters the body, how long the exposure lasts, and what organs in the body are affected. One major way these substances enter the body is through inhalation of either gas or particulate. While many gases are harmful, very small particles penetrate deep into the lungs, contributing to a range of health problems. Exhaust from diesel engines is a major source of these airborne particles. California's Office of Environmental Health Hazard Assessment (OEHHA) has determined that long-term exposure to diesel exhaust particulates poses the highest cancer risk of any toxic air contaminant it has evaluated. Fortunately, improvements to diesel fuel and diesel engines have already reduced emissions of some of the contaminants, which, when fully implemented, will result in a 75 percent reduction in particle emissions from diesel-powered trucks and other equipment by 2010 (compared to 2000 levels) and an 85 percent reduction by 2020.

There are currently no federal project-level requirements for air toxics analysis, and CEQA only requires a consideration of the risks from toxics, with the South Coast Air Quality Management District (SCAQMD) providing the *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (March 2003) for guidance. The SCAQMD has established a maximum individual cancer risk significance threshold of 10 in 1 million (1.0×10^{-5}) (assumes the project will be constructed with best-available control technology for toxics [T-BACT]) and a noncarcinogenic hazard index of 1.0.

According to ARB,[1] when conducting a health risk assessment (HRA), the surrogate for whole diesel exhaust is diesel PM, and is used as the basis for the potential risk calculations. When conducting an HRA, the potential cancer risk from inhalation exposure to diesel PM will outweigh the potential noncancer health impacts. Therefore, inhalation cancer risk is required for every HRA. When comparing whole diesel exhaust to speciated diesel exhaust (e.g., PAHs, metals), potential cancer risk from inhalation exposure to whole diesel exhaust will outweigh the multipathway cancer risk from the speciated components. For this reason, there will be few situations where an analysis of multipathway risk is necessary.[2] To estimate the potential cancer risk associated with project-related diesel engine exhaust, a dispersion model is used to translate an emission rate from a source location to a concentration at a receptor location of interest. Dispersion modeling varies from the simpler, more conservative screening-level analysis to the more complex and refined detailed analysis. This calculation was performed using the EPA-approved SCREEN3 computer model. This model provides conservative estimates of concentrations considering site and source geometry, source strength, distance to receptor, and building wake effects on plume distribution. The SCREEN3 model was developed to provide an easy-to-use method of obtaining pollutant concentration estimates where upper-bound estimates are required or where meteorological data is unavailable. It is a useful tool in proving that an impact is not significant (i.e., if a screening-level analysis demonstrates an impact not significant, its conservative nature provides confidence in this conclusion). Screening-level modeling is less useful in concluding that an impact is

[1] HARP Model Documentation, Appendix K, *Risk Assessment Procedures to Evaluate Particulate Emissions from Diesel-Fueled Engines*, ARB, http://www.arb.ca.gov/toxics/harp/docs/userguide/appendixK.pdf, February 2005.

[2] OEHHA, *Air Toxics Hot Spots Program Risk Assessment Guidelines*, August 2003, Appendix D, *Risk Assessment Procedures to Evaluate Particulate Emissions from Diesel-Fueled Vehicles*, Section B.

significant. When a screening-level analysis indicates a significant impact, this conclusion normally points to the need for a more sophisticated (and less conservative) method of analysis using a model such as ISCST.

This screening-level analysis was conducted as recommended in the OEHHA Guidelines and by the ARB (HARP Model Documentation, Appendix K, Risk Assessment Procedures to Evaluate Particulate Emissions from Diesel-Fueled Engines, ARB, Feb 2005). It consists of several steps including:

1) Determining the PM_{10} emission factor.
2) Determining the PM_{10} emission rate.
3) Determining the PM_{10} concentration at location(s) of interest.
4) Translating the PM_{10} concentration(s) to health risk values.
5) Comparing the health risk values to thresholds and determining significance.

The PM_{10} emission factor was determined by using the ARB model, EMFAC2002, to generate emission factors for diesel trucks both idling and operating on site. As shown in Table E-1, an average factor was developed to more accurately model the average factor over the 70-year exposure period of the health risk analysis. Because the EMFAC2002 model only extends to 2040, it is assumed that vehicle emission factors will stay at that rate until 2076. This is a conservative assumption, as it is expected that the vehicle emission factors will continue to be reduced over time as they have for the last 50 years or more. It is assumed that the trucks operating on site would average 8 miles per hour (mph) overall.

Table E-1: PM_{10} Emission Rates over 70 Years of Health Risk Analysis

Scenario	Light Heavy-Duty (LHD1)		Medium Heavy Duty (MHD)		Heavy Heavy-Duty (HHD)	
	Idling (g/hr)	8 mph (g/mi)	Idling (g/hr)	8 mph (g/mi)	Idling (g/hr)	8 mph (g/mi)
2007 mix[1]	0.069	0.120	0.069	0.692	1.387	0.651
2020 mix[1]	0.054	0.062	0.054	0.342	0.943	0.209
2030 mix[1]	0.049	0.045	0.049	0.269	0.867	0.155
2040 mix[1]	0.044	0.040	0.044	0.252	0.809	0.149
2040 only[2]	0.045	0.018	0.045	0.068	0.801	0.077
Average	**0.052**	**0.057**	**0.052**	**0.325**	**0.961**	**0.248**

Source: The ARB EMFAC2002 model.

In order to determine how many of the total project-related daily trips are attributed to diesel trucks, the total project average daily trips of 13,165 is first broken down into four categories using the data in the ITE Trip Generation Handbook, October 1998, Appendix A Truck Trip Generation, Table A.1 Daily Truck Trip Generation Rates by Land Use, and selecting the Retailing – Regional Center data gives a total of 471 trucks (both gas and diesel powered) unloading and loading per day as shown in Table E-2. Within each of these categories, the ARB model URBEMIS2002 is used to determine what percentage of each

1 EMFAC2002 emission factors for the standard fleet mix of vehicles ranging from new to 45 years old.
2 EMFAC2002 emission factors for only model year 2040 vehicles.

are diesel. It is assumed that each truck idles for 15 minutes per trip to account for stopping at the entry gate, warming up the engine, and miscellaneous tasks. Table E-2 shows the derivation of the overall diesel exhaust emission rate.

Table E-2: Diesel Truck Exhaust Emissions

Super WalMart Building Area sf [1]	Vehicle Type	Trip Generation Handbook Truck Trips per 1,000 sf [2]	Total Truck Trips per Day	% of Trucks That Are Diesel[3]	Total Diesel Trucks per Day
235,000	2 Axle[4]	1.3	306	33.3%	102
	3 Axle[4]	0.6	141	87.5%	123
	4+ Axle[5]	0.1	24	100%	24

Truck Type	Diesel PM_{10} gm/mi (on site) [6]	Distance On Site (mi/trip)	Running Exhaust Diesel PM_{10} (gm/day)	Diesel Idle Exhaust gm/min (on site) [6]	Idle Time (min/trip)	Idle Exhaust Diesel PM_{10} (gm/day)	Total Diesel Exhaust PM_{10} (gm/day)
2 Axle	0.191	0.25	4.9	0.0009	15	1.33	6.2
3 Axle	0.191	0.25	5.9	0.0009	15	1.61	7.5
4+ Axle	0.248	0.25	1.5	0.0160	15	5.6	7.1
					Total Project Site Emissions:		21

Source: LSA Associates, Inc. 2006.
ADT = average daily traffic

Since no specifics on truck movement on site were available, for the purposes of this analysis all diesel truck exhaust was modeled as if it came from a single spot located near the center of the site. This technique was used because it is not known how the trucks will travel on the project site and because it generates health-risk values that are more conservative than the reality of spreading the truck emissions over the site. The SCREEN3 model input parameters are shown in Table E-3. Stack height and diameter were based on observations of many trucks and approximating typical dimensions. Exhaust temperature and velocity were taken from ARB guidance[7].

1 Building area from project description.
2 Data from the Trip Generation Handbook, October 1998, Table A.1 Daily Truck Trip Generation Rates by Land Use.
3 URBEMIS2002 fleet diesel percentages, based on home improvement superstore-type land use.
4 Two- and three-axle trucks are assumed to be 50 percent light-heavy-duty (LHD1) trucks and 50 percent medium-heavy-duty (MHD) trucks.
5 4+ axle trucks are assumed to be heavy-heavy-duty (HHD) trucks.
6 EMFAC2002 emission factors from Table 6.2.C.
7 Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles, Appendix VII, ARB, October 2000.

Table E-3: SCREEN3 Input parameters:

Simple Terrain Inputs:		
Source Type	=	Point
Emission Rate (G/S)	=	1.0
Stack Height (M)	=	2.0
Stk Inside Diam (M)	=	.076
Stk Exit Velocity (M/S)	=	45.4
Stk Gas Exit Temp (K)	=	769
Ambient Air Temp (K)	=	293
Receptor Height (M)	=	0
Urban/Rural Option	=	Urban

Table E-4 shows the TSCREEN3 PM_{10} concentrations at a range of locations using the PM_{10} emission rate from Table E-2 and parameters from Table E-3.

Table E-4: SCREEN3 Modeling Results

Distance to Nearest Residence (m)	PM_{10} Concentrations ($\mu g/m^3$)	
	1-Hr	Annual
600	0.031	0.0025
700	0.025	0.0020
800	0.021	0.0016
900	0.017	0.0014

Source: LSA Associates, Inc. August 2006.

The PM_{10} concentrations are translated to the health risk values shown in Table E-5 using the OEHHA methodology as described in the following equations:

Inhalation cancer risk = (Cair * DBR * A * EF * ED * $1x10^{-6}$) / AT * Inhalation Cancer Potency Factor.

Where:

Cair	Concentration of PM_{10} in air		
DBR	302	Daily breathing rate	(L/kg-day)
A	1	Inhalation absorption factor	
EF	350	Exposure frequency	(days/yr)
ED	70	Exposure duration	(years)
AT	25,550	Avg. time period of exposure	(days)
Diesel PM10	1.1	Inhalation Cancer Potency factor	$(mg/kg-d)^{-1}$

Source: ARB Guidelines, October 2003 & OEHHA Guidelines, August 2003

Table E-5: Proposed Project Lifetime (70-Year) Health Risks

Distance to Nearest Residence (m)	Inhalation Cancer Risk (No. in One Million)	Inhalation Chronic Risk (Hazard Index)
600	0.79	0.0005
700	0.64	0.0004
800	0.53	0.0003
900	0.44	0.0003
Thresholds	**10**	**1.0**

Source: LSA Associates, Inc., August 2006

Table E-5 shows the results of the screening health risk assessment. Even with the conservative modeling technique used (concentrating all truck exhaust to emit from the center of the project area), the risk to which a theoretical person that stood at the nearest residential area, 600 meters (2,000 feet) away, for 70 years (the MICR) would be exposed to is 0.79 in a million, less than the 10 in a million threshold recommended by OEHHA & SCAQMD. The Hazard Index would be 0.0005, less than the threshold of 1.0. This is a less than significant impact.

Construction Assessment

To assess the health impacts of emissions from heavy-duty construction equipment operating onsite during the construction phase a simplified version of the above assessment is performed. Instead of using the techniques shown above in Tables E-1 and E-2 to develop an emission factor of diesel PM, the rate shown in Section 5.1, Construction Impacts, Table F of 4.3 lbs./day was used. While this is only expected to be the emission rate for the peak day of grading and the average PM_{10} emission rate over the entire construction period will be much lower, this analysis conservatively assumes that this peak day emission rate occurs every day for an entire year.

Slightly different factors for the risk calculation were used, an exposure duration of 1 year instead of 70 years and an exposure frequency of 264 days per year (22 days per month for 12 months) instead of 350 days per year, as shown here:

Cair	Concentration of PM_{10} in air		
DBR	302	Daily breathing rate	(L/kg-day)
A	1	Inhalation absorption factor	
EF	264	Exposure frequency	(days/yr)
ED	1	Exposure duration	(years)
AT	25,550	Avg. time period of exposure	(days)
Diesel PM_{10}	1.1	Inhalation Cancer Potency factor	$(mg/kg\text{-}d)^{-1}$
Diesel PM_{10}	5.0	Inhalation Chronic REL	$(\mu g/m^3)$

Source: OEHHA Guidelines, August 2003

This results in carcinogenic and chronic risks as shown in Table E-6.

Table E-6: Construction Emissions Modeling Results

	PM_{10} Concentrations		Inhalation	Chronic
	1-Hr	Annual	Cancer Risk	Hazard
Dist (m)	ug/m^3	ug/m^3	# in a million	Index
600	8.7	0.70	2.4	0.14
700	7.0	0.56	1.9	0.11
800	5.8	0.46	1.6	0.093
900	4.9	0.39	1.3	0.078
Threshold			**10**	**1.0**

Source: LSA Associates, Inc., August 2006

Even with all the conservative assumptions used, the long-term cancer and chronic health risks from construction equipment exhaust are much less than thresholds.